



## SEQUENCE LISTING

<110> Watkins, Maren  
Olivera, Baldomero M.  
Hillyard, David R.  
McIntosh, J. Michael  
Jones, Robert M.

<120> Alpha-Conotoxin Peptides

<130> Alphas 2

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<150> US 60/118,381  
<151> 1999-01-29

<160> 404

<170> PatentIn Ver. 2.0

<210> 1  
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<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Alpha-Conotoxin  
Peptide Generic Formula I

<220>  
<221> PEPTIDE  
<222> (1)..(3)  
<223> Xaa at residue 1 is des-Xaa, Ile, Leu or Val; Xaa  
at residue 2 is des-Xaa, Ala or Gly; Xaa at  
residue 3 is des-Xaa, Gly, Trp (D or L), neo-Trp,  
halo-Trp or any unnatural aromatic amino acid.

<220>  
<221> PEPTIDE  
<222> (4)..(5)  
<223> Xaa at residue 4 is des-Xaa, Gly, Trp (D or L),  
neo-Trp, halo-Trp or any unnatural aromatic amino  
acid; Xaa at residue 5 is Glu, gamma-carboxy-Glu  
(Gla), Asp, Ala, Thr, Ser, Gly, Ile, Tyr, nor-Tyr,

<220>  
<221> PEPTIDE  
<222> (5)..(8)  
<223> mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy  
containing amino acid; Xaa at residue 8 is Ser,  
Thr, Arg, ornithine, homoarginine, Lys,  
N-methyl-Lys,

<220>  
<221> PEPTIDE  
<222> (8)..(9)  
<223> N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any  
unnatural basic amino acid; Xaa at residue 9 is  
Asp, Glu, Gla, Arg, ornithine, homoarginine, Lys,  
N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or

<220>  
 <221> PEPTIDE  
 <222> (9)..(11)  
 <223> any unnatural basic amino acid; Xaa at residue 10 is Ser, Thr, Asn, Ala, Gly, His, halo-His, Pro or hydroxy-Pro; Xaa at residue 11 is Thr, Ser, Ala, Asp, Asn, Pro, hydroxy-Pro,

<220>  
 <221> PEPTIDE  
 <222> (11)..(13)  
 <223> Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 13 is Gly, Ser, Thr, Ala, Asn,

<220>  
 <221> PEPTIDE  
 <222> (13)..(14)  
 <223> Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 14 is Gln, Leu, His, halo-His, Trp (D or L), halo-Trp, neo-Trp,

<220>  
 <221> PEPTIDE  
 <222> (14)  
 <223> Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural basic amino

<220>  
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 <222> (14)..(15)  
 <223> acid or any unnatural aromatic amino acid; Xaa at residue 15 is Asn, His, halo-His, Ile, Leu, Val, Gln, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any

<220>  
 <221> PEPTIDE  
 <222> (15)..(16)  
 <223> unnatural basic amino acid; Xaa at residue 16 is des-Xaa, Val, Ile, Leu, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid.

<400> 1  
 Xaa Xaa Xaa Xaa Xaa Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Cys  
 1 5 10 15

Xaa

<210> 2  
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 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Alpha-Conotoxin  
 Peptide Generic Formula II.

<220>  
 <221> PEPTIDE  
 <222> (1)..(3)  
 <223> Xaa at residue 1 is des-Xaa, Asp, Glu or  
 gamma-carboxy-Glu (Gla); Xaa at residue 2 is  
 des-Xaa, Gln, Ala, Asp, Glu, Gla; Xaa at residue 3  
 is des-Xaa, Gly, Ala, Asp, Glu, Gla, Pro or  
 hydroxy-Pro.

<220>  
 <221> PEPTIDE  
 <222> (4)..(7)  
 <223> Xaa at residue 4 is des-Xaa4, Gly, Glu, Gla, Gln,  
 Asp, Asn, Pro or hydroxy-Pro; Xaa at residue 7 is  
 Ser, Thr, Gly, Glu, Gla, Asn, Trp (D or L),  
 neo-Trp, halo-Trp, Arg, ornithine, homoarginine,

<220>  
 <221> PEPTIDE  
 <222> (7)  
 <223> Lys, N-methyl-Lys, N,N-dimethyl-Lys,  
 N,N,N-trimethyl-Lys, any unnatural basic amino  
 acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,  
 O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any  
 unnatural hydroxy

<220>  
 <221> PEPTIDE  
 <222> (7)..(8)  
 <223> containing amino acid; Xaa at residue 8 is Asp,  
 Asn, His, halo-His, Thr, Ser, Tyr, nor-Tyr,  
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
 O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy

<220>  
 <221> PEPTIDE  
 <222> (8)..(10)  
 <223> containing amino acid; Xaa at residue 9 is Pro or  
 hydroxy-Pro; Xaa at residue 10 is Ala, Ser, Thr,  
 Asp, Val, Ile, Pro, hydroxy-Pro, Tyr, nor-Tyr,  
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,

<220>  
 <221> PEPTIDE  
 <222> (10)..(12)  
 <223> O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy  
 containing amino acid; Xaa at residue 12 is Gly,  
 Ile, Leu, Val, Ala, Thr, Ser, Pro, hydroxy-Pro,  
 Phe, Trp (D or L), neo-Trp, halo-Trp, Arg,  
 ornithine,

<220>  
 <221> PEPTIDE  
 <222> (12)..(13)  
 <223> homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys,  
 N,N,N-trimethyl-Lys, any unnatural basic amino  
 acid or any unnatural aromatic amino acid; Xaa at  
 residue 13 is Ala, Asn, Phe, Pro, hydroxy-Pro,

<220>

<221> PEPTIDE  
<222> (13)  
<223> Glu, Gln, Gln, His, halo-His, Val, Ser, Thr, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid.

<220>  
<221> PEPTIDE  
<222> (14)  
<223> Xaa at residue 14 is Thr, Ser, His, halo-His, Leu, Ile, Val, Asn, Met, Pro, hydroxy-Pro, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural basic

<220>  
<221> PEPTIDE  
<222> (14)..(15)  
<223> amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 15 is Asn, Pro, hydroxy-Pro, Gln, Ser, Thr,

<220>  
<221> PEPTIDE  
<222> (15)  
<223> Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural basic amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr

<220>  
<221> PEPTIDE  
<222> (15)..(16)  
<223> or any unnatural hydroxy containing amino acid; Xaa at residue 16 is des-Xaa, Gly, Thr, Ser, Pro, hydroxy-Pro, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any

<220>  
<221> PEPTIDE  
<222> (16)..(17)  
<223> unnatural hydroxy containing amino acid; Xaa at residue 17 is des-Xaa14, Ile, Val, Asp, Leu, Phe, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any unnatural

<220>  
<221> PEPTIDE  
<222> (17)..(19)  
<223> basic amino acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy containing amino acid; Xaa at residue 19 is des-Xaa, Gly, Ala, Met, Ser,

<220>  
<221> PEPTIDE  
<222> (19)



<223> Thr, Trp (D or L), neo-Trp, halo-Trp, any unnatural aromatic amino acid, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid.

<220>

<221> PEPTIDE

<222> (20)

<223> Xaa at residue 20 is des-Xaa, Trp (D or L), neo-Trp, halo-Trp, any unnatural aromatic amino acid, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any

<220>

<221> PEPTIDE

<222> (20)..(21)

<223> unnatural basic amino acid; Xaa at residue 21 is des-Xaa, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid.

<400> 2

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1 5 10 15

Xaa Cys Xaa Xaa Xaa  
20

<210> 3

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Alpha-Conotoxin Peptide Generic Formula III.

<220>

<221> PEPTIDE

<222> (1)..(3)

<223> Xaa at residue 1 is des-Xaa, Ser or Thr; Xaa at residue 2 is des-Xaa, Asp, Glu, -carboxy-Glu (Gla), Asn, Ser or Thr; Xaa at residue 3 is des-Xaa, Ala, Gly, Asn, Ser, Thr, Pro, hydroxy-Pro, Arg,

<220>

<221> PEPTIDE

<222> (3)..(4)

<223> ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino acid; Xaa at residue 4 is des-Xaa, Ala, Val, Leu, Ile, Gly, Glu, Gla, Gln, Asp, Asn, Phe,

<220>

<221> PEPTIDE

<222> (4)..(5)

<223> Pro, hydroxy-Pro or any unnatural aromatic amino acid; Xaa at residue 5 is des-Xaa, Thr, Ser, Asp,

Glu, Gla, Gln, Gly, Val, Asp, Asn, Ala, Pro,  
hydroxy-Pro, Arg, ornithine, homoarginine, Lys,

- <220>  
<221> PEPTIDE  
<222> (5)..(8)  
<223> N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or any unnatural basic amino  
acid; Xaa at residue 8 is Thr, Ser, Asp, Asn, Met,  
Val, Ala, Gly, Leu, Ile, Phe, any unnatural  
aromatic amino acid,
- <220>  
<221> PEPTIDE  
<222> (8)..(9)  
<223> Pro, hydroxy-Pro, Tyr, nor-Tyr, mono-halo-Tyr,  
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr,  
nitro-Tyr or any unnatural hydroxy containing  
amino acid; Xaa at residue 9 is Ile, Leu, Val,  
Ser, Thr, Gln,
- <220>  
<221> PEPTIDE  
<222> (9)  
<223> Asn, Asp, Arg, His, halo-His, Phe, any unnatural  
aromatic amino acid, homoarginine, ornithine, Lys,  
N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys, any unnatural basic amino  
acid, Tyr, nor-Tyr,
- <220>  
<221> PEPTIDE  
<222> (9)..(10)  
<223> mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy  
containing amino acid; Xaa at residue 10 is Pro,  
hydroxy-Pro, Ser, Thr, Ile, Asp, Leu, Val, Gly,  
Ala, Phe,
- <220>  
<221> PEPTIDE  
<222> (10)..(11)  
<223> any unnatural aromatic amino acid, Arg, ornithine,  
homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or any unnatural basic amino  
acid; Xaa at residue 11 is Val, Ala, Gly, Ile,
- <220>  
<221> PEPTIDE  
<222> (11)..(13)  
<223> Leu, Asp, Ser, Thr, Pro, hydroxy-Pro, Arg,  
ornithine, homoarginine, Lys, N-methyl-Lys,  
N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any  
unnatural basic amino acid; Xaa at residue 13 is  
His, halo-His,
- <220>  
<221> PEPTIDE  
<222> (13)  
<223> Arg, homoarginine, ornithine, Lys, N-methyl-Lys,  
N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any  
unnatural basic amino acid, Asn, Ala, Ser, Thr,  
Phe, Ile, Leu, Gly, Trp (D or L), neo-Trp,  
halo-Trp, any

<220>  
<221> PEPTIDE  
<222> (13)..(14)  
<223> unnatural aromatic amino acid, Tyr, nor-Tyr,  
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy  
containing amino acid; Xaa at residue 14 is Leu,  
Gln, Val, Ile,

<220>  
<221> PEPTIDE  
<222> (14)  
<223> Gly, Met, Ala, Lys, N-methyl-Lys,  
N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, Ser, Thr,  
Arg, homoarginine, ornithine, any unnatural basic  
amino acid, Asn, Glu, Glu, Gln, Phe, Trp (D or L),  
neo-Trp,

<220>  
<221> PEPTIDE  
<222> (14)..(15)  
<223> halo-Trp or any unnatural aromatic amino acid; Xaa  
at residue 15 is Glu, Glu, Gln, Asn, Asp, Pro,  
hydroxy-Pro, Ser, Gly, Thr, Lys, N-methyl-Lys,  
N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, Arg,

<220>  
<221> PEPTIDE  
<222> (15)  
<223> homoarginine, ornithine, any unnatural basic amino  
acid, Phe, His, halo-His, any unnatural aromatic  
amino acid, Leu, Met, Gly, Ala, Tyr, nor-Tyr,  
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,

<220>  
<221> PEPTIDE  
<222> (15)..(16)  
<223> O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy  
containing amino acid; Xaa at residue 16 is His,  
halo-His, Asn, Thr, Ser, Ile, Val, Leu, Phe, any  
unnatural aromatic amino acid, Arg, homoarginine,

<220>  
<221> PEPTIDE  
<222> (16)  
<223> ornithine, Lys, N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys, any unnatural basic amino  
acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,  
O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr or any  
unnatural

<220>  
<221> PEPTIDE  
<222> (16)..(17)  
<223> hydroxy containing amino acid; Xaa at residue 17  
is Ser, Thr, Ala, Gln, Pro, hydroxy-Pro, Gly, Ile,  
Leu, Arg, ornithine, homoarginine, Lys,  
N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or any

<220>  
<221> PEPTIDE  
<222> (17)..(18)  
<223> unnatural basic amino acid; Xaa at residue 18 is

Asn, Glu, Gla, Asp, Gly, His, halo-His, Ala, Leu,  
Gln, Arg, ornithine, homoarginine, Lys,  
N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys, any

- <220>  
<221> PEPTIDE  
<222> (18)..(19)  
<223> unnatural basic amino acid, Tyr, nor-Tyr,  
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
O-phospho-Tyr, nitro-Tyr or any unnatural hydroxy  
containing amino acid; Xaa at residue 19 is Met,  
Ile, Thr, Ser,
- <220>  
<221> PEPTIDE  
<222> (19)  
<223> Val, Leu, Pro, hydroxy-Pro, Phe, any unnatural  
aromatic amino acid, Tyr, nor-Tyr, mono-halo-Tyr,  
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr,  
nitro-Tyr, any unnatural hydroxy containing amino  
acid,
- <220>  
<221> PEPTIDE  
<222> (19)..(21)  
<223> Glu, Gla, Ala, His, halo-His, Arg, ornithine,  
homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or any unnatural basic amino  
acid; Xaa at residue 21 is des-Xaa, Gly, Asp, Asn,
- <220>  
<221> PEPTIDE  
<222> (21)..(22)  
<223> Ala, Ile, Leu, Ser, Thr, His, halo-His, Arg,  
ornithine, homoarginine, Lys, N-methyl-Lys,  
N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any  
unnatural basic amino acid; Xaa at residue 22 is  
des-Xaa, Gly,
- <220>  
<221> PEPTIDE  
<222> (22)  
<223> Glu, Gla, Gln, Trp (D or L), neo, halo-Trp, any  
unnatural aromatic amino acid, Arg, ornithine,  
homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or any unnatural basic amino  
acid.
- <220>  
<221> PEPTIDE  
<222> (23)  
<223> Xaa at residue 23 is des-Xaa, Ser, Thr, Val, Ile,  
Ala, Arg, ornithine, homoarginine, Lys,  
N-methyl-Lys, N,N-dimethyl-Lys,  
N,N,N-trimethyl-Lys or any unnatural basic amino  
acid.
- <220>  
<221> PEPTIDE  
<222> (24)  
<223> Xaa at residue 24 is des-Xaa, Val, Asp, His,  
halo-His, Arg, ornithine, homoarginine, Lys,  
N-methyl-Lys, N,N-dimethyl-Lys,

N,N,N-trimethyl-Lys or any unnatural basic amino acid.

<220>

<221> PEPTIDE

<222> (25)..(26)

<223> Xaa at residue 25 is des-Xaa, Asn, Pro or hydroxy-Pro; Xaa at residue 26 is des-Xaa, Arg, ornithine, homoarginine, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys or any unnatural basic amino

<220>

<221> PEPTIDE

<222> (26)..(28)

<223> acid; Xaa at residue 27 is des-Xaa, Ser or Thr; Xaa at residue 28 is des-Xaa, Leu, Ile or Val.

<400> 3

Xaa Xaa Xaa Xaa Xaa Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa  
1 5 10 15

Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
20 25

<210> 4

<211> 14

<212> PRT

<213> Conus imperialis

<220>

<221> PEPTIDE

<222> (2)..(11)

<223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residue 11 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 4

Asp Xaa Cys Cys Ser Asp Ser Arg Cys Gly Xaa Asn Cys Leu  
1 5 10

<210> 5

<211> 12

<212> PRT

<213> Conus imperialis

<220>

<221> PEPTIDE

<222> (10)

<223> Xaa at residue 10 is Trp (D or L) or halo-Trp.

<400> 5

Ala Cys Cys Ser Asp Arg Arg Cys Arg Xaa Arg Cys  
1 5 10

<210> 6

<211> 13

<212> PRT

<213> Conus regius

<400> 6

Phe Thr Cys Cys Arg Arg Gly Thr Cys Ser Gln His Cys  
 1 5 10

<210> 7  
 <211> 13  
 <212> PRT  
 <213> Conus regius  
 <220>  
 <221> PEPTIDE  
 <222> (2)  
 <223> Xaa at residue 2 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 7  
 Asp Xaa Cys Cys Arg Arg His Ala Cys Thr Leu Ile Cys  
 1 5 10

<210> 8  
 <211> 13  
 <212> PRT  
 <213> Conus regius  
 <220>  
 <221> PEPTIDE  
 <222> (2)..(8)  
 <223> Xaa at residue 2 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr; Xaa at residues 7 and 8 is Pro or  
 hydroxy-Pro.

<400> 8  
 Asp Xaa Cys Cys Arg Arg Xaa Xaa Cys Thr Leu Ile Cys  
 1 5 10

<210> 9  
 <211> 13  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (6)..(10)  
 <223> Xaa at residue 6 is Pro or hdroxy-Pro; Xaa at  
 residue 10 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 9  
 Gly Cys Cys Ser Asp Xaa Arg Cys Arg Xaa Arg Cys Arg  
 1 5 10

<210> 10  
 <211> 13  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE

<222> (7)..(11)  
 <223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 11 is Trp (D or L) or halo-Trp.

<400> 10  
 Gly Gly Cys Cys Ser Asp Xaa Arg Cys Ala Xaa Arg Cys  
 1 5 10

<210> 11  
 <211> 17  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (3)..(10)  
 <223> Xaa at residue 3 is Trp (D or L) or halo-Trp; Xaa at residue 9 is Glu or gamma-carboxy-Glu; Xaa at residue 10 is Pro or hydroxy-Pro.

<220>  
 <221> PEPTIDE  
 <222> (15)  
 <223> Xaa at residue 15 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 11  
 Ile Ala Xaa Asp Ile Cys Cys Ser Xaa Xaa Asp Cys Asn His Xaa Cys  
 1 5 10 15

Val

<210> 12  
 <211> 12  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (6)..(9)  
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 9 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 12  
 Gly Cys Cys Ser Asp Xaa Arg Cys Xaa His Gln Cys  
 1 5 10

<210> 13  
 <211> 14  
 <212> PRT  
 <213> Conus sponsalis

<220>  
 <221> PEPTIDE  
 <222> (5)..(11)  
 <223> Xaa at residues 5 and 11 is Pro or hydroxy-Pro; Xaa at residue 8 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 13  
Cys Cys Ser Asp Xaa Ala Cys Xaa Gln Thr Xaa Gly Cys Arg  
1 5 10

<210> 14  
<211> 13  
<212> PRT  
<213> Conus sponsalis

<220>  
<221> PEPTIDE  
<222> (3)..(5)  
<223> Xaa at residue 3 is Glu or gamma-carboxy-Glu; Xaa  
at residue 5 is Pro or hydroxy-Pro.

<400> 14  
Cys Cys Xaa Asn Xaa Ala Cys Arg His Thr Gln Gly Cys  
1 5 10

<210> 15  
<211> 13  
<212> PRT  
<213> Conus sulcatus

<220>  
<221> PEPTIDE  
<222> (4)..(12)  
<223> Xaa at residue 4 is Trp or halo-Trp; Xaa at  
residue 6 is Pro or hydroxy-Pro; Xaa at residue 12  
is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,  
O-sulpho-Tyr, O-phospho-Tyr or Nitro-Tyr.

<400> 15  
Gly Cys Cys Xaa His Xaa Ala Cys Gly Arg His Xaa Cys  
1 5 10

<210> 16  
<211> 14  
<212> PRT  
<213> Conus achatinus

<220>  
<221> PEPTIDE  
<222> (2)..(11)  
<223> Xaa at residues 2 and 7 is Pro or hydroxy-Pro; Xaa  
at residue 11 is Lys, N-methyl-Lys,  
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 16  
Ala Xaa Cys Cys Asn Asn Xaa Ala Cys Val Xaa His Arg Cys  
1 5 10

<210> 17  
<211> 15  
<212> PRT  
<213> Conus bullatus

<220>  
<221> PEPTIDE  
<222> (2)..(12)



<223> Xaa at residues 2 and 8 is Pro or hydroxy-Pro; Xaa at residue 12 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 17

Ala Xaa Gly Cys Cys Asn Asn Xaa Ala Cys Val Xaa His Arg Cys  
1 5 10 15

<210> 18

<211> 14

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (1)..(11)

<223> Xaa at residues 1, 2 and 7 is Pro or hydroxy-Pro; Xaa at residue 11 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 18

Xaa Xaa Cys Cys Asn Asn Xaa Ala Cys Val Xaa His Arg Cys  
1 5 10

<210> 19

<211> 16

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (2)..(13)

<223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residue 6 is Trp or halo-Trp; Xaa at residues 8 11 and 13 is Pro or hydroxy-Pro.

<400> 19

Asp Xaa Asn Cys Cys Xaa Asn Xaa Ser Cys Xaa Arg Xaa Arg Cys Thr  
1 5 10 15

<210> 20

<211> 13

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (6)..(12)

<223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa at residue 12 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 20

Gly Cys Cys Ser Arg Xaa Xaa Cys Ala Val Leu Xaa Cys  
1 5 10

<210> 21

<211> 13

<212> PRT

<213> Conus circumciscus

<220>

<221> PEPTIDE

<222> (6)

<223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 21

Gly Cys Cys Gly Asn Xaa Asp Cys Thr Ser His Ser Cys  
1 5 10

<210> 22

<211> 16

<212> PRT

<213> Conus stercusmuscarum

<220>

<221> PEPTIDE

<222> (6)..(11)

<223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 11 is Glu or gamma-carboxy-Glu.

<400> 22

Gly Cys Cys Ser Asn Xaa Val Cys His Leu Xaa His Ser Asn Met Cys  
1 5 10 15

<210> 23

<211> 17

<212> PRT

<213> Conus obscurus

<220>

<221> PEPTIDE

<222> (6)..(15)

<223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at residue 14 is Glu or gamma-carboxy-Glu; Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 23

Gly Cys Cys Ser Asn Xaa Val Cys Arg Gln Asn Asn Ala Xaa Xaa Cys  
1 5 10 15

Arg

<210> 24

<211> 18

<212> PRT

<213> Conus textile

<220>

<221> PEPTIDE

<222> (1)..(15)

<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro; Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 24

Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile  
1 5 10 15

Cys Arg

<210> 25  
 <211> 18  
 <212> PRT  
 <213> Conus radiatus

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
 Xaa at residues 2 and 15 is Glu or  
 gamma-carboxy-Glu.

<400> 25  
 Xaa Xaa Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile  
 1 5 10 15

Cys Arg

<210> 26  
 <211> 18  
 <212> PRT  
 <213> Conus radiatus

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 26  
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile  
 1 5 10 15

Cys Asp

<210> 27  
 <211> 18  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 27  
 Xaa Arg Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile  
 1 5 10 15

Cys Arg

<210> 28  
 <211> 18

<212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(14)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro.

<400> 28  
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Gly Ile  
           1                  5                  10                  15

Cys Arg

<210> 29  
 <211> 18  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
       Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 29  
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Thr  
           1                  5                  10                  15

Cys Arg

<210> 30  
 <211> 18  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
       Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 30  
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Val  
           1                  5                  10                  15

Cys Arg

<210> 31  
 <211> 18  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
       Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 31  
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Ile Asp His Xaa Xaa Ile  
 1 5 10 15

Cys Arg

<210> 32  
 <211> 21  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 32  
 Xaa Gln Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile  
 1 5 10 15

Cys Arg Arg Arg Arg  
 20

<210> 33  
 <211> 17  
 <212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE  
 <222> (7)..(15)  
 <223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro;  
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 33  
 Gly Gly Cys Cys Ser His Xaa Ala Cys Ala Val Asn His Xaa Xaa Leu  
 1 5 10 15

Cys

<210> 34  
 <211> 16  
 <212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE  
 <222> (6)..(14)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 34  
 Gly Cys Cys Ser His Xaa Ala Cys Ser Val Asn His Xaa Xaa Leu Cys  
 1 5 10 15

<210> 35  
 <211> 16

<212> PRT  
 <213> Conus dalli

<220>  
 <221> PEPTIDE  
 <222> (6)..(14)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 35  
 Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile Cys  
           1                          5                          10                          15

<210> 36  
 <211> 19  
 <212> PRT  
 <213> Conus obscurus

<220>  
 <221> PEPTIDE  
 <222> (6)..(18)  
 <223> Xaa at residues 6 and 15 is Pro or hydroxy-Pro;  
 Xaa at residue 11 is Lys, N,-methyl-Lys,  
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at  
 residues 14 and 18 is Glu or gamma-carboxy-Glu.

<400> 36  
 Gly Cys Cys Ser His Xaa Ala Cys Ser Gly Xaa Thr Gln Xaa Xaa Cys  
           1                          5                          10                          15

Arg Xaa Ser

<210> 37  
 <211> 18  
 <212> PRT  
 <213> Conus tulipa

<220>  
 <221> PEPTIDE  
 <222> (1)..(14)  
 <223> Xaa at residues 1, 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 37  
 Xaa Cys Cys Ser His Xaa Ala Cys Ser Gly Asn Asn Xaa Xaa Phe Cys  
           1                          5                          10                          15

Arg Gln

<210> 38  
 <211> 18  
 <212> PRT  
 <213> Conus tulipa

<220>  
 <221> PEPTIDE  
 <222> (6)..(14)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

Arg Gln

Gly

<210> 42  
 <211> 16  
 <212> PRT  
 <213> Conus distans

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 42  
 Gly Cys Cys Ser Asn Xaa Xaa Cys Ala His Asn Asn Xaa Asp Cys Arg  
     1                    5                    10                    15

<210> 43  
 <211> 17  
 <212> PRT  
 <213> Conus tulipa

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 43  
 Gly Cys Cys Ser Asn Xaa Ala Cys Ala Gly Asn Asn Xaa His Val Cys  
     1                    5                    10                    15

Arg

<210> 44  
 <211> 16  
 <212> PRT  
 <213> Conus dalli

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 44  
 Gly Cys Cys Ser Arg Xaa Ala Cys Ile Ala Asn Asn Xaa Asp Leu Cys  
     1                    5                    10                    15

<210> 45  
 <211> 20  
 <212> PRT  
 <213> Conus circumciscus

<220>  
 <221> PEPTIDE  
 <222> (6)..(14)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
       Xaa at residues 11 and 14 is Glu or  
       gamma-carboxy-Glu.

<400> 45  
 Gly Cys Cys Ser Asn Xaa Val Cys His Val Xaa His Xaa Xaa Leu Cys  
     1                    5                    10                    15



Arg Arg Arg Arg  
20

<210> 46  
<211> 18  
<212> PRT  
<213> Conus sulcatus

<220>  
<221> PEPTIDE  
<222> (7)..(15)  
<223> Xaa at residues 7, 12 and 14 is Pro or  
hydroxy-Pro; Xaa at residue 11 is Lys,  
N-methyl-Lys, N,N-dimethyl-Lys or  
N,N,N-trimethyl-Lys; Xaa at residue 15 is Glu or  
gamma-carboxy-Glu.

<400> 46  
Gly Gly Cys Cys Ser Phe Xaa Ala Cys Arg Xaa Xaa Arg Xaa Xaa Met  
1 5 10 15

Cys Gly

<210> 47  
<211> 18  
<212> PRT  
<213> Conus textile

<220>  
<221> PEPTIDE  
<222> (1)..(15)  
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro;  
Xaa at residues 2 and 15 is Glu or  
gamma-carboxy-Glu.

<400> 47  
Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Asn Ser Ser His Xaa Xaa Leu  
1 5 10 15

Cys Arg

<210> 48  
<211> 18  
<212> PRT  
<213> Conus dalli

<220>  
<221> PEPTIDE  
<222> (1)..(15)  
<223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-pro;  
Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 48  
Xaa Gln Cys Cys Ser Asp Xaa Arg Cys Asn Val Gly His Xaa Xaa Leu  
1 5 10 15

Cys Gly

<210> 49  
 <211> 18  
 <212> PRT  
 <213> Conus dalli

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at  
 residues 7 and 14 is Pro or hydroxy-Pro; Xaa at  
 residue 15 is Glu or gamma-carboxy-Glu.

<400> 49  
 Xaa Val Cys Cys Ser Asp Xaa Arg Cys Asn Val Gly His Xaa Xaa Ile  
 1 5 10 15

Cys Gly

<210> 50  
 <211> 16  
 <212> PRT  
 <213> Conus textile

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 50  
 Gly Cys Cys Ser Arg Xaa Xaa Cys Ile Ala Asn Asn Xaa Asp Leu Cys  
 1 5 10 15

<210> 51  
 <211> 18  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1 and 14 is Pro or hydroxy-Pro;  
 Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 51  
 Xaa Gln Cys Cys Ser His Leu Ala Cys Asn Val Asp His Xaa Xaa Ile  
 1 5 10 15

Cys Arg

<210> 52  
 <211> 19  
 <212> PRT  
 <213> Conus sulcatus

<220>  
 <221> PEPTIDE  
 <222> (5)..(14)  
 <223> Xaa at residue 5 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or

nitro-Tyr; Xaa at residue 13 is Pro or hydroxy-Pro; Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<220>  
 <221> PEPTIDE  
 <222> (18)  
 <223> Xaa at residue 18 is Trp or halo-Trp.  
 <400> 52  
 Gly Cys Cys Ser Xaa Phe Asp Cys Arg Met Met Phe Xaa Xaa Met Cys  
           1                  5                          10                          15

Gly Xaa Arg

<210> 53  
 <211> 18  
 <212> PRT  
 <213> Conus sulcatus

<220>  
 <221> PEPTIDE  
 <222> (11)..(12)  
 <223> Xaa at residue 11 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at residue 12 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<220>  
 <221> PEPTIDE  
 <222> (14)..(15)  
 <223> Xaa at residue 14 is Pro or hydroxy-Pro; Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 53  
 Gly Gly Cys Cys Ser Phe Ala Ala Cys Arg Xaa Xaa Arg Xaa Xaa Met  
           1                  5                          10                          15

Cys Gly

<210> 54  
 <211> 20  
 <212> PRT  
 <213> Conus sulcatus

<220>  
 <221> PEPTIDE  
 <222> (7)..(15)  
 <223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 10 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 54  
 Gly Gly Cys Cys Phe His Xaa Val Cys Xaa Ile Asn Leu Leu Xaa Met  
           1                  5                          10                          15

Cys Arg Gln Arg

20

<210> 55  
 <211> 19  
 <212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE  
 <222> (7)..(15)  
 <223> Xaa at residues 7, 11 and 14 is Tyr, nor-Tyr,  
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
 O-phospho-Tyr; Xaa at residues 8, 9 and 15 is Pro  
 or hydroxy-Pro.

<220>  
 <221> PEPTIDE  
 <222> (12)..(16)  
 <223> Xaa at residues 12 and 16 is Glu or  
 gamma-carboxy-Glu.

<400> 55  
 Ser Ala Thr Cys Cys Asn Xaa Xaa Xaa Cys Xaa Xaa Thr Xaa Xaa Xaa  
           1                  5                  10                  15

Ser Cys Leu

<210> 56  
 <211> 17  
 <212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE  
 <222> (5)..(13)  
 <223> Xaa at residues 5 and 12 is Tyr, no-Tyr,  
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
 O-phospho-Tyr or nitro-Tyr; Xaa at residues 6, 7  
 and 13 is Pro or hydroxy-Pro.

<220>  
 <221> PEPTIDE  
 <222> (10)..(14)  
 <223> Xaa at residues 10 and 14 is Glu or  
 gamma-carboxy-Glu.

<400> 56  
 Ala Cys Cys Ala Xaa Xaa Xaa Cys Phe Xaa Ala Xaa Xaa Xaa Arg Cys  
           1                  5                  10                  15

Leu

<210> 57  
 <211> 19  
 <212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE

<222> (3)..(16)

<223> Xaa at residues 3, 12 and 16 is Glu or gamma-carboxy-Glu; Xaa at residues 6, 7, 11 and 14 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<220>

<221> PEPTIDE

<222> (8)..(15)

<223> Xaa at residues 8, 9 and 15 is Pro or hydroxy-Pro.

<400> 57

Asn Ala Xaa Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Ala Xaa Xaa Xaa  
1 5 10 15

Ile Cys Leu

<210> 58

<211> 227

<212> DNA

<213> Conus magus

<220>

<221> CDS

<222> (1)..(189)

<400> 58

atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gac 96  
Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp  
20 25 30

aaa gcg tct gac gtg atc acg ctg gcc ctc aag gga tgc tgt tcc aac 144  
Lys Ala Ser Asp Val Ile Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn  
35 40 45

cct gtc tgt cac ttg gag cat tca aac ctt tgt ggt aga aga cgc 189  
Pro Val Cys His Leu Glu His Ser Asn Leu Cys Gly Arg Arg Arg  
50 55 60

tgatgctcca ggaccctctg aaccacgacg ttcgagca 227

<210> 59

<211> 63

<212> PRT

<213> Conus magus

<400> 59

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp  
20 25 30

Lys Ala Ser Asp Val Ile Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn  
35 40 45

Pro Val Cys His Leu Glu His Ser Asn Leu Cys Gly Arg Arg Arg

50

55

60

<210> 60  
 <211> 208  
 <212> DNA  
 <213> Conus aulicus

<220>  
 <221> CDS  
 <222> (1)..(168)

<400> 60  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca gat cgt gca tct gat ggc agg aag gac gca gcg tct ggc 96  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly  
 20 25 30  
 ctg atc gct ctg acc atc aag gga tgc tgt tct tat cct ccc tgt ttc 144  
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe  
 35 40 45  
 gcg act aat tca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198  
 Ala Thr Asn Ser Asp Tyr Cys Gly  
 50 55  
 accacgacgt 208

<210> 61  
 <211> 56  
 <212> PRT  
 <213> Conus aulicus

<400> 61  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly  
 20 25 30  
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe  
 35 40 45  
 Ala Thr Asn Ser Asp Tyr Cys Gly  
 50 55

<210> 62  
 <211> 205  
 <212> DNA  
 <213> Conus aulicus

<220>  
 <221> CDS  
 <222> (1)..(174)

<400> 62  
 atg ttc acc gtg ttt ctg ttg gtc gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

ttc act tca gat cgt gca tct gat ggc agg aag gac gca gcg tct ggc 96  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly  
                   20                  25                  30  
 ctg att gct ctg acc atg aag gga tgc tgt tct tat cct ccc tgt ttc 144  
 Leu Ile Ala Leu Thr Met Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe  
                   35                  40                  45  
 gcg act aat cca gac tgt ggt cga cga cgc tgatgctcca ggaccctctg 194  
 Ala Thr Asn Pro Asp Cys Gly Arg Arg Arg  
                   50                  55  
 aaccacgacg t 205

<210> 63  
 <211> 58  
 <212> PRT  
 <213> Conus aulicus

<400> 63  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
      1                  5                  10                  15  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Lys Asp Ala Ala Ser Gly  
                   20                  25                  30  
 Leu Ile Ala Leu Thr Met Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe  
                   35                  40                  45  
 Ala Thr Asn Pro Asp Cys Gly Arg Arg Arg  
                   50                  55

<210> 64  
 <211> 223  
 <212> DNA  
 <213> Conus textile

<220>  
 <221> CDS  
 <222> (1)..(192)

<400> 64  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
      1                  5                  10                  15  
 ttc tct tca ggt cgt agt aca ttt cgt ggc agg aat gcc gca gcc aaa 96  
 Phe Ser Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys  
                   20                  25                  30  
 gcg tct ggc ctg gtc agt ctg act gac agg aga cca gaa tgc tgt agt 144  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser  
                   35                  40                  45  
 gat cct cgc tgt aac tcg agt cat cca gaa ctt tgt ggt gga aga cgc 192  
 Asp Pro Arg Cys Asn Ser Ser His Pro Glu Leu Cys Gly Gly Arg Arg  
                   50                  55                  60  
 tgatgctcca ggaccctctg aaccacgacg t 223

<210> 65

<211> 64  
 <212> PRT  
 <213> Conus textile

<400> 65  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                  5                  10                  15  
 Phe Ser Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys  
                   20                  25                  30  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser  
                   35                  40                  45  
 Asp Pro Arg Cys Asn Ser Ser His Pro Glu Leu Cys Gly Gly Arg Arg  
     50                  55                  60

<210> 66  
 <211> 244  
 <212> DNA  
 <213> Conus textile

<220>  
 <221> CDS  
 <222> (1)..(168)

<400> 66  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc gcc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Val Ser  
     1                  5                  10                  15  
 ttc act tca gat cgt gca tct gat gac ggg aaa gcc gct gcg tct gac 96  
 Phe Thr Ser Asp Arg Ala Ser Asp Asp Gly Lys Ala Ala Ala Ser Asp  
                   20                  25                  30  
 ctg atc act ctg acc atc aag gga tgc tgt tct cgt cct ccc tgt atc 144  
 Leu Ile Thr Leu Thr Ile Lys Gly Cys Cys Ser Arg Pro Pro Cys Ile  
                   35                  40                  45  
 gcg aat aat cca gac ttg tgt ggt tgacgacgct gatgctccag aacggtctga 198  
 Ala Asn Asn Pro Asp Leu Cys Gly  
     50                  55  
 accacgacgt tcgagcaatg ttcaccgtgt ttctgttggg tgtcctt 244

<210> 67  
 <211> 56  
 <212> PRT  
 <213> Conus textile

<400> 67  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Ala Val Val Ser  
     1                  5                  10                  15  
 Phe Thr Ser Asp Arg Ala Ser Asp Asp Gly Lys Ala Ala Ala Ser Asp  
                   20                  25                  30  
 Leu Ile Thr Leu Thr Ile Lys Gly Cys Cys Ser Arg Pro Pro Cys Ile  
                   35                  40                  45  
 Ala Asn Asn Pro Asp Leu Cys Gly  
     50                  55



<210> 68  
 <211> 223  
 <212> DNA  
 <213> Conus textile

<220>  
 <221> CDS  
 <222> (1)..(183)

<400> 68  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca ggt cgt agt aca ttt cgt ggc agg aat gcc gca gcc aaa 96  
 Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys  
 20 25 30  
 gcg tct ggc ctg gtc agt ctg act gac agg aga cca caa tgc tgt tct 144  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser  
 35 40 45  
 cat cct gcc tgt aac gta gat cat cca gaa att tgt cgt tgaagacgct 193  
 His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg  
 50 55 60  
 gatgctccag gaccctctga accacgacgt 223

<210> 69  
 <211> 61  
 <212> PRT  
 <213> Conus textile

<400> 69  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys  
 20 25 30  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser  
 35 40 45  
 His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg  
 50 55 60

<210> 70  
 <211> 223  
 <212> DNA  
 <213> Conus radiatus

<220>  
 <221> CDS  
 <222> (1)..(183)

<400> 70  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca ggt cgt cgt aca ttt cat ggc agg aat gcc gca gcc aaa 96

Phe Thr Ser Gly Arg Arg Thr Phe His Gly Arg Asn Ala Ala Ala Lys  
 20 25 30  
 gcg tct ggc ctg gtc agt ctg act gac agg aga cca gaa tgc tgt tct 144  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser  
 35 40 45  
 cat cct gcc tgt aac gta gat cat cca gaa att tgt cgt tgaagacgct 193  
 His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg  
 50 55 60  
 gatgctccag gaccctctga accacgacgt 223

<210> 71  
 <211> 61  
 <212> PRT  
 <213> Conus radiatus

<400> 71  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Thr Ser Gly Arg Arg Thr Phe His Gly Arg Asn Ala Ala Ala Lys  
 20 25 30  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser  
 35 40 45  
 His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Arg  
 50 55 60

<210> 72  
 <211> 223  
 <212> DNA  
 <213> Conus radiatus

<220>  
 <221> CDS  
 <222> (1)..(183)

<400> 72  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca ggt cgt agt aca ttt cgt ggc agg aat gcc gca gcc aaa 96  
 Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys  
 20 25 30  
 gcg tct ggc ctg gtc agt ctg act gac agg aga cca caa tgc tgt tct 144  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser  
 35 40 45  
 cat cct gcc tgt aac gta gat cat cca gaa att tgc gat tgaagacgct 193  
 His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Asp  
 50 55 60  
 gatgctccag gaccctctga accacgacgt 223

<210> 73  
 <211> 61

<212> PRT  
 <213> Conus radiatus

<400> 73  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 Phe Thr Ser Gly Arg Ser Thr Phe Arg Gly Arg Asn Ala Ala Ala Lys  
           20                    25                    30  
 Ala Ser Gly Leu Val Ser Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser  
           35                    40                    45  
 His Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Asp  
       50                    55                    60

<210> 74  
 <211> 218  
 <212> DNA  
 <213> Conus striatus

<220>  
 <221> CDS  
 <222> (1)..(171)

<400> 74  
 atg ttc act gtg ttt ctg ttg gtt gtc ttg gca atc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Ile Thr Val Val Ser  
     1                    5                    10                    15  
 ttc cct tta gat cgt gaa tct gat ggc gcg aat gcc gaa gcc cgc acc 96  
 Phe Pro Leu Asp Arg Glu Ser Asp Gly Ala Asn Ala Glu Ala Arg Thr  
           20                    25                    30  
 cac gat cat gag aag cac gca ctg gac cgg aat gga tgc tgt agg aat 144  
 His Asp His Glu Lys His Ala Leu Asp Arg Asn Gly Cys Cys Arg Asn  
       35                    40                    45  
 cct gcc tgt gag agc cac aga tgt ggt tgacgacgct gatgctccag 191  
 Pro Ala Cys Glu Ser His Arg Cys Gly  
       50                    55  
 gaccctctga accacgacgt tcgagca 218

<210> 75  
 <211> 57  
 <212> PRT  
 <213> Conus striatus

<400> 75  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Ile Thr Val Val Ser  
     1                    5                    10                    15  
 Phe Pro Leu Asp Arg Glu Ser Asp Gly Ala Asn Ala Glu Ala Arg Thr  
           20                    25                    30  
 His Asp His Glu Lys His Ala Leu Asp Arg Asn Gly Cys Cys Arg Asn  
       35                    40                    45  
 Pro Ala Cys Glu Ser His Arg Cys Gly  
       50                    55

<210> 76  
 <211> 227  
 <212> DNA  
 <213> Conus bandanus

<220>  
 <221> CDS  
 <222> (1)..(180)

<400> 76  
 atg ttc acc atg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
 Met Phe Thr Met Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc gct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aag gac 96  
 Phe Ala Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Lys Asp  
 20 25 30  
 aaa gcg tct gac ctg gtc gct ctg acc gtc aag gga tgc tgt tct cat 144  
 Lys Ala Ser Asp Leu Val Ala Leu Thr Val Lys Gly Cys Cys Ser His  
 35 40 45  
 cct gcc tgt agc gtg aat aat cca gac att tgt ggt tgaagacgct 190  
 Pro Ala Cys Ser Val Asn Asn Pro Asp Ile Cys Gly 60  
 50 55 60  
 gatgctccag gaccctctga accacgacgt togagca 227

<210> 77  
 <211> 60  
 <212> PRT  
 <213> Conus bandanus

<400> 77  
 Met Phe Thr Met Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Ala Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Lys Asp  
 20 25 30  
 Lys Ala Ser Asp Leu Val Ala Leu Thr Val Lys Gly Cys Cys Ser His  
 35 40 45  
 Pro Ala Cys Ser Val Asn Asn Pro Asp Ile Cys Gly  
 50 55 60

<210> 78  
 <211> 104  
 <212> DNA  
 <213> Conus bandanus

<220>  
 <221> CDS  
 <222> (1)..(54)

<400> 78  
 aaa gaa tgc tgt act cat cct gcc tgt cac gtg agt cat cca gaa ctc 48  
 Lys Glu Cys Cys Thr His Pro Ala Cys His Val Ser His Pro Glu Leu  
 1 5 10 15  
 tgt ggt tgaaaagcga cgtgacgctc caggaccctc tgaaccacga cgttcgagca 104  
 Cys Gly

<210> 82  
<211> 174

<212> DNA  
 <213> Conus characteristicus

<220>  
 <221> CDS  
 <222> (1)..(171)

<400> 82  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtg gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca gat cgt gct tct gat ggc agg aat gcc gca gcc aac gcg 96  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala  
 20 25 30  
 ttt gac ctg atc gct ctg atc gcc agg caa aat tgc tgt agc att ccc 144  
 Phe Asp Leu Ile Ala Leu Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro  
 35 40 45  
 agc tgt tgg gag aaa tat aaa tgt agt taa 174  
 Ser Cys Trp Glu Lys Tyr Lys Cys Ser  
 50 55

<210> 83  
 <211> 57  
 <212> PRT  
 <213> Conus characteristicus

<400> 83  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala  
 20 25 30  
 Phe Asp Leu Ile Ala Leu Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro  
 35 40 45  
 Ser Cys Trp Glu Lys Tyr Lys Cys Ser  
 50 55

<210> 84  
 <211> 219  
 <212> DNA  
 <213> Conus characteristicus

<220>  
 <221> CDS  
 <222> (1)..(189)

<400> 84  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtg gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca gat cgt gcg tct gaa ggc agg aat gct gca gcc aag gac 96  
 Phe Thr Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Ala Ala Lys Asp  
 20 25 30  
 aaa gcg tct gac ctg gtg gct ctg aca gtc agg gga tgc tgt gcc att 144  
 Lys Ala Ser Asp Leu Val Ala Leu Thr Val Arg Gly Cys Cys Ala Ile

tgatgctcca ggaccctctg aaccacgacg / 219

<400> 85  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15  
Phe Thr Ser Asp Arg Ala Ser Glu Gly Arg Asn Ala Ala Ala Lys Asp  
20 25 30  
Lys Ala Ser Asp Leu Val Ala Leu Thr Val Arg Gly Cys Cys Ala Ile  
35 40 45  
Arg Glu Cys Arg Leu Gln Asn Ala Ala Tyr Cys Gly Gly Ile Tyr  
50 55 60

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<220>
<221> CDS
<222> (1)..(186)
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|          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 86 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| atg      | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48  |
| Met      | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |     |
| 1        |     |     |     | 5   |     |     |     | 10  |     |     |     | 15  |     |     |     |     |
|          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ttc      | cct | tca | gat | att | gca | act | gag | ggc | agg | aat | gcc | gca | gcc | aaa | gcg | 96  |
| Phe      | Pro | Ser | Asp | Ile | Ala | Thr | Glu | Gly | Arg | Asn | Ala | Ala | Ala | Lys | Ala |     |
| 20       |     |     |     | 25  |     |     |     | 30  |     |     |     |     |     |     |     |     |
|          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ttt      | gac | ctg | ata | tct | tcg | atc | gtc | aag | aaa | gga | tgc | tgt | tcc | cat | cct | 144 |
| Phe      | Asp | Leu | Ile | Ser | Ser | Ile | Val | Lys | Lys | Gly | Cys | Cys | Ser | His | Pro |     |
| 35       |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |     |     |     |
|          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| gcc      | tgt | tcg | ggg | aat | aat | cca | gaa | ttt | tgt | cgt | caa | ggg | cgc |     |     | 186 |
| Ala      | Cys | Ser | Gly | Asn | Asn | Pro | Glu | Phe | Cys | Arg | Gln | Gly | Arg |     |     |     |
| 50       |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |     |     |     |

tgatgctcca ggaccctctg aaccacgacg t 217

<400> 87  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser

1                      5                      10                      15  
Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala  
                         20                      25                      30  
Phe Asp Leu Ile Ser Ser Ile Val Lys Lys Gly Cys Cys Ser His Pro  
                         35                      40                      45  
Ala Cys Ser Gly Asn Asn Pro Glu Phe Cys Arg Gln Gly Arg  
                         50                      55                      60

<210> 88  
<211> 217  
<212> DNA  
<213> Conus tulipa

<220>  
<221> CDS  
<222> (1)..(186)

<400> 88  
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1                      5                      10                      15  
ttc cct tca gat ata gca act gag ggc agg aat gcc gca gcc aaa gcg 96  
Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala  
                         20                      25                      30  
ttt gac ctg ata tct tcg atc gtc agg aaa gga tgc tgt tcc aat ccc 144  
Phe Asp Leu Ile Ser Ser Ile Val Arg Lys Gly Cys Cys Ser Asn Pro  
                         35                      40                      45  
gcc tgt gcg ggg aat aat cca cat gtt tgt cgt caa ggt cgc 186  
Ala Cys Ala Gly Asn Asn Pro His Val Cys Arg Gln Gly Arg  
                         50                      55                      60  
tgatgctcca ggaccctctg aaccacgacg t 217

<210> 89  
<211> 62  
<212> PRT  
<213> Conus tulipa

<400> 89  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1                      5                      10                      15  
Phe Pro Ser Asp Ile Ala Thr Glu Gly Arg Asn Ala Ala Ala Lys Ala  
                         20                      25                      30  
Phe Asp Leu Ile Ser Ser Ile Val Arg Lys Gly Cys Cys Ser Asn Pro  
                         35                      40                      45  
Ala Cys Ala Gly Asn Asn Pro His Val Cys Arg Gln Gly Arg  
                         50                      55                      60

<210> 90  
<211> 226  
<212> DNA  
<213> Conus sulcatus



<220>  
 <221> CDS  
 <222> (1)..(195)

<400> 90  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc aat tca gat cgt gat cca gca tta ggt ggc agg aat gct gca gcc 96  
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala  
 20 25 30  
 aaa gcg tct gac aag atc gct tcg acc ctc aag aga aga gga tgc tgt 144  
 Lys Ala Ser Asp Lys Ile Ala Ser Thr Leu Lys Arg Arg Gly Cys Cys  
 35 40 45  
 tcg tat ttt gac tgt aga atg atg ttt cca gaa atg tgt ggt tgg cga 192  
 Ser Tyr Phe Asp Cys Arg Met Met Phe Pro Glu Met Cys Gly Trp Arg  
 50 55 60  
 ggc tgatgctcca ggaccctctg aaccacgacg t 226  
 Gly  
 65

<210> 91  
 <211> 65  
 <212> PRT  
 <213> Conus sulcatus

<400> 91  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala  
 20 25 30  
 Lys Ala Ser Asp Lys Ile Ala Ser Thr Leu Lys Arg Arg Gly Cys Cys  
 35 40 45  
 Ser Tyr Phe Asp Cys Arg Met Met Phe Pro Glu Met Cys Gly Trp Arg  
 50 55 60  
 Gly  
 65

<210> 92  
 <211> 226  
 <212> DNA  
 <213> Conus sulcatus

<220>  
 <221> CDS  
 <222> (1)..(195)

<400> 92  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc aat tca gat cgt gat cca gca tta ggt ggc agg aat gct gca gcc 96  
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala

20 25 30

ata gcg tct gac aag atc gct tct acc ctc agg aga gga gga tgc tgt 144  
 Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys  
 35 40 45

tct ttt cct gcc tgt aga aag tat cgt cca gaa atg tgt ggt gga cga 192  
 Ser Phe Pro Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg  
 50 55 60

cgc tgatgctcca ggaccctctg aaccacgacg t 226  
 Arg  
 65

<210> 93  
 <211> 65  
 <212> PRT  
 <213> Conus sulcatus

<400> 93  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala  
 20 25 30

Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys  
 35 40 45

Ser Phe Pro Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg  
 50 55 60

Arg  
 65

<210> 94  
 <211> 211  
 <212> DNA  
 <213> Conus sulcatus

<220>  
 <221> CDS  
 <222> (1)..(180)

<400> 94  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

ttc act tca gat cat gaa tct gat cgc ggt gat gcc caa acc atc caa 96  
 Phe Thr Ser Asp His Glu Ser Asp Arg Gly Asp Ala Gln Thr Ile Gln  
 20 25 30

gaa gtg ttt gag atg ttc gct ctg gac agc gat gga tgc tgt tgg cat 144  
 Glu Val Phe Glu Met Phe Ala Leu Asp Ser Asp Gly Cys Cys Trp His  
 35 40 45

cct gct tgt ggc aga cac tat tgt ggt cga aga cgc tgatgctcca 190  
 Pro Ala Cys Gly Arg His Tyr Cys Gly Arg Arg Arg  
 50 55 60

ggaccctctg aaccacgacg t 211

<210> 95  
 <211> 60  
 <212> PRT  
 <213> Conus sulcatus

<400> 95  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 Phe Thr Ser Asp His Glu Ser Asp Arg Gly Asp Ala Gln Thr Ile Gln  
             20                    25                    30  
 Glu Val Phe Glu Met Phe Ala Leu Asp Ser Asp Gly Cys Cys Trp His  
             35                    40                    45  
 Pro Ala Cys Gly Arg His Tyr Cys Gly Arg Arg Arg  
             50                    55                    60

<210> 96  
 <211> 202  
 <212> DNA  
 <213> Conus sulcatus

<220>  
 <221> CDS  
 <222> (1)..(195)

<400> 96  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 ttc aat tca gat cgt gat cca gca tta ggt ggc agg aat gct gca gcc 96  
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala  
             20                    25                    30  
 ata gcg tct gac aag atc gct tct acc ctc agg aga gga gga tgc tgt 144  
 Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys  
             35                    40                    45  
 tct ttt gct gcc tgt aga aag tat cgt cca gaa atg tgt ggt gga cga 192  
 Ser Phe Ala Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg  
             50                    55                    60  
 cgc tgatgct 202  
 Arg  
     65

<210> 97  
 <211> 65  
 <212> PRT  
 <213> Conus sulcatus

<400> 97  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 Phe Asn Ser Asp Arg Asp Pro Ala Leu Gly Gly Arg Asn Ala Ala Ala  
             20                    25                    30  
 Ile Ala Ser Asp Lys Ile Ala Ser Thr Leu Arg Arg Gly Gly Cys Cys

35 40 45  
 Ser Phe Ala Ala Cys Arg Lys Tyr Arg Pro Glu Met Cys Gly Gly Arg  
 50 55 60

Arg  
 65

<210> 98  
 <211> 220  
 <212> DNA  
 <213> Conus sulcatus

<220>  
 <221> CDS  
 <222> (1)..(189)

<400> 98  
 atg ttc acc gtg ttt ctg ttg gtt ctc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Leu Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc aat tca gat cgt gca tta ggt ggc agg aat gct gca gcc aaa gcg 96  
 Phe Asn Ser Asp Arg Ala Leu Gly Gly Arg Asn Ala Ala Lys Ala  
 20 25 30  
 tct gac aag atc ctt tcg aac ctc agg aga gga gga tgc tgt ttt cat 144  
 Ser Asp Lys Ile Leu Ser Asn Leu Arg Arg Gly Gly Cys Cys Phe His  
 35 40 45  
 cct gtc tgt tac atc aat ctt cta gaa atg tgt cgt caa cga ggc 189  
 Pro Val Cys Tyr Ile Asn Leu Leu Glu Met Cys Arg Gln Arg Gly  
 50 55 60  
 tgatcgtcca ggaccctctg aaccacgacg t 220

<210> 99  
 <211> 63  
 <212> PRT  
 <213> Conus sulcatus

<400> 99  
 Met Phe Thr Val Phe Leu Leu Val Leu Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Asn Ser Asp Arg Ala Leu Gly Gly Arg Asn Ala Ala Lys Ala  
 20 25 30  
 Ser Asp Lys Ile Leu Ser Asn Leu Arg Arg Gly Gly Cys Cys Phe His  
 35 40 45  
 Pro Val Cys Tyr Ile Asn Leu Leu Glu Met Cys Arg Gln Arg Gly  
 50 55 60

<210> 100  
 <211> 208  
 <212> DNA  
 <213> Conus consors

<220>  
 <221> CDS

&lt;222&gt; (1)..(177)

&lt;400&gt; 100

|   |     |
|---|-----|
| atg ttc acc gtg ttt ctg ttg gtt gtc ttg aca acc act gtc gtt tcc   | 48  |
| Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser   |     |
| 1 5 10 15   |     |
| ttc cct tca gat agt gca tct gat gtc agg gat gac gaa gcc aaa gac   | 96  |
| Phe Pro Ser Asp Ser Ala Ser Asp Val Arg Asp Asp Glu Ala Lys Asp   |     |
| 20 25 30  |     |
| gaa agg tct gac atg tac aaa tcg aaa cgg aat gga cgc tgt tgc cat   | 144 |
| Glu Arg Ser Asp Met Tyr Lys Ser Lys Arg Asn Gly Arg Cys Cys His   |     |
| 35 40 45  |     |
| cct gcc tgt ggc aaa cac ttt agt tgt gga cgc tgatgctcca ggaccctctg | 197 |
| Pro Ala Cys Gly Lys His Phe Ser Cys Gly Arg                       |     |
| 50 55   |     |
| aaccacgacg t  | 208 |

&lt;210&gt; 101

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Conus consors

&lt;400&gt; 101

|   |  |
|---|--|
| Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser |  |
| 1 5 10 15   |  |
| Phe Pro Ser Asp Ser Ala Ser Asp Val Arg Asp Asp Glu Ala Lys Asp |  |
| 20 25 30  |  |
| Glu Arg Ser Asp Met Tyr Lys Ser Lys Arg Asn Gly Arg Cys Cys His |  |
| 35 40 45  |  |
| Pro Ala Cys Gly Lys His Phe Ser Cys Gly Arg                     |  |
| 50 55   |  |

&lt;210&gt; 102

&lt;211&gt; 219

&lt;212&gt; DNA

&lt;213&gt; Conus stercusmuscarum

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(189)

&lt;400&gt; 102

|   |     |
|---|-----|
| atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc | 48  |
| Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser |     |
| 1 5 10 15   |     |
| tcc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gag | 96  |
| Ser Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Glu |     |
| 20 25 30  |     |
| aaa gcg tct gac gtg atc gcg ctg gcc ctc aag gga tgc tgt tcc aac | 144 |
| Lys Ala Ser Asp Val Ile Ala Leu Ala Leu Lys Gly Cys Cys Ser Asn |     |
| 35 40 45  |     |
| cct gtc tgt cac ctg gag cat tca aac atg tgt ggt aga aga cgc     | 189 |

Pro Val Cys His Leu Glu His Ser Asn Met Cys Gly Arg Arg Arg  
50 55 60

tgatgctcca ggaccctctg aaccacgacg

219

<210> 103

<211> 63

<212> PRT

<213> Conus stercusmuscarum

<400> 103

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Ser Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Glu  
20 25 30

Lys Ala Ser Asp Val Ile Ala Leu Ala Leu Lys Gly Cys Cys Ser Asn  
35 40 45

Pro Val Cys His Leu Glu His Ser Asn Met Cys Gly Arg Arg Arg  
50 55 60

<210> 104

<211> 248

<212> DNA

<213> Conus betulinus

<220>

<221> CDS

<222> (1)..(180)

<400> 104

atg ttc tcc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
Met Phe Ser Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

tcc act tca ggt ggt gca tct ggt ggc agg aag gct gca gcc aaa gcg 96  
Ser Thr Ser Gly Gly Ala Ser Gly Gly Arg Lys Ala Ala Ala Lys Ala  
20 25 30

tct aac cgg atc gct ctg acc gtc agg agt gca aca tgc tgt aat tat 144  
Ser Asn Arg Ile Ala Leu Thr Val Arg Ser Ala Thr Cys Cys Asn Tyr  
35 40 45

cct ccc tgt tac gag act tat cca gaa agt tgt ctg taacgtgaat 190  
Pro Pro Cys Tyr Glu Thr Tyr Pro Glu Ser Cys Leu  
50 55 60

catccagagc tttgtggctg aagacactga tgctccagga ccctctgaac cagcagct 248

<210> 105

<211> 60

<212> PRT

<213> Conus betulinus

<400> 105

Met Phe Ser Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Ser Thr Ser Gly Gly Ala Ser Gly Gly Arg Lys Ala Ala Ala Lys Ala

<220>  
<221> CDS

&lt;222&gt; (1)..(180)

&lt;400&gt; 108

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | act | tca | ggt | cgt | gca | tct | ggt | ggc | agg | aat | gct | gca | gcc | aaa | gcg | 96 |
| Phe | Thr | Ser | Gly | Arg | Ala | Ser | Gly | Gly | Arg | Asn | Ala | Ala | Ala | Lys | Ala |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| tct | aac | cgg | atc | gct | atg | gcc | atc | agc | agt | gga | gca | tgc | tgt | gca | tat | 144 |
| Ser | Asn | Arg | Ile | Ala | Met | Ala | Ile | Ser | Ser | Gly | Ala | Cys | Cys | Ala | Tyr |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |            |  |  |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|--|--|--|-----|
| cct | ccc | tgt | ttc | gag | gct | tat | cca | gaa | aga | tgt | ctg | taacgtgaat |  |  |  | 190 |
| Pro | Pro | Cys | Phe | Glu | Ala | Tyr | Pro | Glu | Arg | Cys | Leu |            |  |  |  |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |            |  |  |  |     |

|            |     |         |            |            |            |          |     |
|------------|-----|---------|------------|------------|------------|----------|-----|
| catccagacc | ttt | gtggctg | aagacgctga | tgccccagga | ccctctgaac | cacgacgt | 248 |
|------------|-----|---------|------------|------------|------------|----------|-----|

&lt;210&gt; 109

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Conus betulinus

&lt;400&gt; 109

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Thr | Ser | Gly | Arg | Ala | Ser | Gly | Gly | Arg | Asn | Ala | Ala | Ala | Lys | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Asn | Arg | Ile | Ala | Met | Ala | Ile | Ser | Ser | Gly | Ala | Cys | Cys | Ala | Tyr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Pro | Cys | Phe | Glu | Ala | Tyr | Pro | Glu | Arg | Cys | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |

&lt;210&gt; 110

&lt;211&gt; 223

&lt;212&gt; DNA

&lt;213&gt; Conus betulinus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(192)

&lt;400&gt; 110

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | act | tca | gat | cgt | gca | ttt | cgt | ggc | agg | aat | tcc | gca | gcc | aac | gac | 96 |
| Phe | Thr | Ser | Asp | Arg | Ala | Phe | Arg | Gly | Arg | Asn | Ser | Ala | Ala | Asn | Asp |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| aaa | agg | tct | gac | ctg | gcc | gct | ctg | agc | gtc | agg | aga | gga | tgc | tgc | tcc | 144 |
| Lys | Arg | Ser | Asp | Leu | Ala | Ala | Leu | Ser | Val | Arg | Arg | Gly | Cys | Cys | Ser |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| cat | ccc | gcc | tgt | agc | gtg | aat | cat | cca | gag | ctt | tgt | ggt | aga | aga | cgc | 192 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|



His Pro Ala Cys Ser Val Asn His Pro Glu Leu Cys Gly Arg Arg Arg  
 50 55 60

tgatgccccca ggaccctctg aaccacgacg t

223

<210> 111

<211> 64

<212> PRT

<213> Conus betulinus

<400> 111

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ser Ala Ala Asn Asp  
 20 25 30

Lys Arg Ser Asp Leu Ala Ala Leu Ser Val Arg Arg Gly Cys Cys Ser  
 35 40 45

His Pro Ala Cys Ser Val Asn His Pro Glu Leu Cys Gly Arg Arg Arg  
 50 55 60

<210> 112

<211> 248

<212> DNA

<213> Conus betulinus

<220>

<221> CDS

<222> (1)..(180)

<400> 112

atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

ttc act tca ggt cgt gca tct ggt ggc agg aat gct gca gcc aaa gcg 96  
 Phe Thr Ser Gly Arg Ala Ser Gly Gly Arg Asn Ala Ala Lys Ala  
 20 25 30

tct aac cgg atc gct ctg atc gtc agg aat gca gaa tgc tgt tat tat 144  
 Ser Asn Arg Ile Ala Leu Ile Val Arg Asn Ala Glu Cys Cys Tyr Tyr  
 35 40 45

cct ccc tgt tac gag gct tat cca gaa att tgt ctg taacgtgaat 190  
 Pro Pro Cys Tyr Glu Ala Tyr Pro Glu Ile Cys Leu  
 50 55 60

catccagacc ttgtgtgctg aagaccctga tgctccagga ccctctgaac caccgacgt 248

<210> 113

<211> 60

<212> PRT

<213> Conus betulinus

<400> 113

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Phe Thr Ser Gly Arg Ala Ser Gly Gly Arg Asn Ala Ala Ala Lys Ala

20 25 30  
 Ser Asn Arg Ile Ala Leu Ile Val Arg Asn Ala Glu Cys Cys Tyr Tyr  
 35 40 45  
 Pro Pro Cys Tyr Glu Ala Tyr Pro Glu Ile Cys Leu  
 50 55 60

<210> 114  
 <211> 207  
 <212> DNA  
 <213> Conus pennaceus

<220>  
 <221> CDS  
 <222> (1)..(168)

<400> 114  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc att tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ile Ser  
 1 5 10 15  
 ttc act tca gat cgt gca tct gat ggc ggg aat gcc gca gcg tct gac 96  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Ala Ser Asp  
 20 25 30  
 ctg atc gct ctg acc atc aag gga tgc tgt tct cat cct ccc tgt gcc 144  
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala  
 35 40 45  
 atg aat aat cca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198  
 Met Asn Asn Pro Asp Tyr Cys Gly  
 50 55  
 accacgacg 207

<210> 115  
 <211> 56  
 <212> PRT  
 <213> Conus pennaceus

<400> 115  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ile Ser  
 1 5 10 15  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Ala Ala Ala Ser Asp  
 20 25 30  
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala  
 35 40 45  
 Met Asn Asn Pro Asp Tyr Cys Gly  
 50 55

<210> 116  
 <211> 207  
 <212> DNA  
 <213> Conus pennaceus

<220>  
 <221> CDS

&lt;222&gt; (1)..(168)

&lt;400&gt; 116

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | acc | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | act | tca | gat | cgt | gca | tct | gat | ggc | ggg | aat | gcc | gca | atg | tct | gac | 96 |
| Phe | Thr | Ser | Asp | Arg | Ala | Ser | Asp | Gly | Gly | Asn | Ala | Ala | Met | Ser | Asp |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ctg | atc | gct | ctg | acc | atc | aag | gga | tgc | tgt | tct | cat | cct | ccc | tgt | ttc | 144 |
| Leu | Ile | Ala | Leu | Thr | Ile | Lys | Gly | Cys | Cys | Ser | His | Pro | Pro | Cys | Phe |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |            |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|------------|-----|
| ctg | aat | aat | cca | gac | tat | tgt | ggg | tgacgacgct | gatgctccag | gaccctctga | 198 |
| Leu | Asn | Asn | Pro | Asp | Tyr | Cys | Gly |            |            |            |     |
|     | 50  |     |     |     |     | 55  |     |            |            |            |     |

|           |     |
|-----------|-----|
| accacgacg | 207 |
|-----------|-----|

&lt;210&gt; 117

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Conus pennaceus

&lt;400&gt; 117

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Thr | Ser | Asp | Arg | Ala | Ser | Asp | Gly | Gly | Asn | Ala | Ala | Met | Ser | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ile | Ala | Leu | Thr | Ile | Lys | Gly | Cys | Cys | Ser | His | Pro | Pro | Cys | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Asn | Asn | Pro | Asp | Tyr | Cys | Gly |
|     | 50  |     |     |     |     | 55  |     |

&lt;210&gt; 118

&lt;211&gt; 210

&lt;212&gt; DNA

&lt;213&gt; Conus stercusmuscarum

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(171)

&lt;400&gt; 118

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | cct | tca | gat | cgt | gaa | tct | gat | ggc | gag | aat | gac | gaa | gcc | cgc | acc | 96 |
| Phe | Pro | Ser | Asp | Arg | Glu | Ser | Asp | Gly | Ala | Asn | Asp | Glu | Ala | Arg | Thr |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| gac | gag | cct | gag | gag | cac | gga | ccg | gac | agg | aat | gga | tgc | tgt | agg | aat | 144 |
| Asp | Glu | Pro | Glu | Glu | His | Gly | Pro | Asp | Arg | Asn | Gly | Cys | Cys | Arg | Asn |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|
| cct | gcc | tgt | gag | agc | cac | aga | tgt | ggg | tgacgacgct | gatgctccag | 191 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|

Pro Ala Cys Glu Ser His Arg Cys Gly  
50 55

gaccctctga accacgacg

210

<210> 119

<211> 57

<212> PRT

<213> Conus stercusmuscarum

<400> 119

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Phe Pro Ser Asp Arg Glu Ser Asp Gly Ala Asn Asp Glu Ala Arg Thr  
20 25 30

Asp Glu Pro Glu Glu His Gly Pro Asp Arg Asn Gly Cys Cys Arg Asn  
35 40 45

Pro Ala Cys Glu Ser His Arg Cys Gly.  
50 55

<210> 120

<211> 210

<212> DNA

<213> Conus circumcisis

<220>

<221> CDS

<222> (1)..(180)

<400> 120

atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc agc gac 96  
Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Ser Asp  
20 25 30

aga gcg tct gac gcg gcc cac cag gga tgc tgt tcc aac cct gtc tgt 144  
Arg Ala Ser Asp Ala Ala His Gln Gly Cys Cys Ser Asn Pro Val Cys  
35 40 45

cac gtg gaa cat cca gaa ctt tgt cgt aga aga cgc tgatgctcca 190  
His Val Glu His Pro Glu Leu Cys Arg Arg Arg Arg  
50 55 60

ggaccctctg aaccacgacg

210

<210> 121

<211> 60

<212> PRT

<213> Conus circumcisis

<400> 121

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Ser Asp

20 25 30

Arg Ala Ser Asp Ala Ala His Gln Gly Cys Cys Ser Asn Pro Val Cys  
35 40 45

His Val Glu His Pro Glu Leu Cys Arg Arg Arg Arg  
50 55 60

<210> 122  
<211> 213  
<212> DNA  
<213> Conus circumciscus

<220>  
<221> CDS  
<222> (1)..(174)

<400> 122  
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

ttc cct tca aat cgt gaa tct gat ggc gcg aat gcc gaa gtc cgc acc 96  
Phe Pro Ser Asn Arg Glu Ser Asp Gly Ala Asn Ala Glu Val Arg Thr  
20 25 30

gac gag cct gag gag cac gac gaa ctg ggc ggg aat gga tgc tgt ggg 144  
Asp Glu Pro Glu Glu His Asp Glu Leu Gly Gly Asn Gly Cys Cys Gly  
35 40 45

aat cct gac tgt acg agc cac agt tgt gat tgacgacgct gatgctccag 194  
Asn Pro Asp Cys Thr Ser His Ser Cys Asp  
50 55

gaccctctga accacgacg 213

<210> 123  
<211> 58  
<212> PRT  
<213> Conus circumciscus

<400> 123  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Phe Pro Ser Asn Arg Glu Ser Asp Gly Ala Asn Ala Glu Val Arg Thr  
20 25 30

Asp Glu Pro Glu Glu His Asp Glu Leu Gly Gly Asn Gly Cys Cys Gly  
35 40 45

Asn Pro Asp Cys Thr Ser His Ser Cys Asp  
50 55

<210> 124  
<211> 207  
<212> DNA  
<213> Conus episcopatus

<220>  
<221> CDS

<400> 124

ttc act tca gat ~~cgt~~ gca tct gat agc agg aag gac gca gcg tct ggc 96  
Phe Thr Ser Asp ~~Arg~~ Ala Ser Asp Ser Arg Lys Asp Ala Ala Ser Gly  
20 25 30

ctg atc gct ctg acc atc aag gga tgc tgt tct gat cct cgc tgt aac 144  
Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser Asp Pro Arg Cys Asn  
35 40 45

atg aat aat cca gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198  
Met Asn Asn Pro Asp Tyr Cys Gly  
50 55

accacgacg 207

<210> 125

<211> 56

<212> PRT

<213> Conus episcopatus

<400> 125

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Ser Arg Lys Asp Ala Ala Ser Gly  
20 25 30

Leu Ile Ala Leu Thr Ile Lys Gly Cys ~~Cys~~ Ser Asp Pro Arg Cys Asn  
35 40 45

Met Asn Asn Pro Asp Tyr Cys Gly  
50 55

<210> 126

$\langle 211 \rangle$  213

<212> DNA

<213> Conus sponsalis

<220>

<221> CDS

<222> (1) .. (174)

<400> 126

atg tcc acc gtg ttt ctg ttg gtt gtc ctc gca acc acc gtc gtt tcc 48  
Met Ser Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
1 5 10 15

ttc act gta gat cgt gca tct gat ggc agg gat gtc gca atc gac gac 96  
Phe Thr Val Asp Arg Ala Ser Asp Gly Arg Asp Val Ala Ile Asp Asp  
20 25 30

aga ttg gtg tct ctc cct cag atc gcc cat gct gac tgt ~~tgt~~ tcc gat 144  
Arg Leu Val Ser Leu Pro Gln Ile Ala His Ala Asp Cys ~~Cys~~ Ser Asp  
35 40 45

cct gcc tgc aag cag acg ccc ggt tgt cgt taaagacgct gctgctccag 194

gaccctctga accacgacg

```
<210> 127
<211> 58
<212> PRT
<213> Conus sponsalis
```

Phe Thr Val Asp Arg Ala Ser Asp Gly Arg Asp Val Ala Ile Asp Asp  
20 25 30

Arg Leu Val Ser Leu Pro Gln Ile Ala His Ala Asp Cys Cys Ser Asp  
35 40 45

Pro Ala Cys Lys Gln Thr Pro Gly Cys Arg  
50 55

```
<210> 128
<211> 221
<212> DNA
<213> Conus sponsalis
```

```
<220>
<221> CDS
<222> (1)..(168)
```

```
<400> 128
atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gct tcc 48
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ala Ser
    1             5             10             15
```

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | att | atc | gat | gat | cca | tct | gat | ggc | agg | aat | att | gca | gtc | gac | gac | 96 |
| Phe | Ile | Ile | Asp | Asp | Pro | Ser | Asp | Gly | Arg | Asn | Ile | Ala | Val | Asp | Asp |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

aga ggg ctt ttc tct acg ctc ttc cat gct gat tgc tgt gaa aat cct 144  
Arg Gly Leu Phe Ser Thr Leu Phe His Ala Asp Cys Cys Glu Asn Pro  
35 40 45

gcc tgt aga cac acg cag ggt tgt tgatcttgt tcttcaaaga cactgctggc 198  
Ala Cys Arg His Thr Gln Gly Cys  
50 55

ccaggaccct ctgaaccacg acg 221

```
<210> 129
<211> 56
<212> PRT
<213> Conus sponsalis
```

<400> 129  
Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Ala Ser  
1 5 10 15

Phe Ile Ile Asp Asp Pro Ser Asp Gly Arg Asn Ile ~~Ala~~ Val Asp Asp

20 25 30  
 Arg Gly Leu Phe Ser Thr Leu Phe His Ala Asp Cys Cys Glu Asn Pro  
           35                  40                  45

Ala Cys Arg His Thr Gln Gly Cys  
      50                  55

<210> 130  
 <211> 220  
 <212> DNA  
 <213> Conus dalli

<220>  
 <221> CDS  
 <222> (1)..(180)

<400> 130  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
      1                  5                  10                  15  
 ttc act tca gat cgt gca ttt cgt ggc agg aat gcc gca gcc aaa gag 96  
 Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Lys Glu  
                   20                  25                  30  
 tct ggc ctg gtc ggt ctg acc gac aag acg cga gga tgc tgt tct cat 144  
 Ser Gly Leu Val Gly Leu Thr Asp Lys Thr Arg Gly Cys Cys Ser His  
           35                  40                  45  
 cct gcc tgt aac gta gat cat cca gaa att tgt ggt tgaagacgct 190  
 Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Gly  
      50                  55                  60  
 gatgctccag gaccctctga accacgacgt 220

<210> 131  
 <211> 60  
 <212> PRT  
 <213> Conus dalli

<400> 131  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
      1                  5                  10                  15  
 Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Glu  
                   20                  25                  30  
 Ser Gly Leu Val Gly Leu Thr Asp Lys Thr Arg Gly Cys Cys Ser His  
           35                  40                  45  
 Pro Ala Cys Asn Val Asp His Pro Glu Ile Cys Gly  
      50                  55                  60

<210> 132  
 <211> 208  
 <212> DNA  
 <213> Conus dalli

<220>  
 <221> CDS



&lt;222&gt; (1)..(177)

&lt;400&gt; 132

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | acc | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | act | tca | gat | ggg | gca | tct | gat | gac | agg | aaa | gcc | gct | gcg | tct | gac | 96 |
| Phe | Thr | Ser | Asp | Gly | Ala | Ser | Asp | Asp | Arg | Lys | Ala | Ala | Ala | Ser | Asp |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ctg | atc | act | ctg | acc | atc | aag | gga | tgc | tgt | tct | cgt | cct | ccc | tgt | atc | 144 |
| Leu | Ile | Thr | Leu | Thr | Ile | Lys | Gly | Cys | Cys | Ser | Arg | Pro | Pro | Cys | Ile |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|
| gcg | aat | aat | cca | gac | ttg | tgt | ggg | cga | cga | cgc | tgatgctcca | ggaccctctg | 197 |
| Ala | Asn | Asn | Pro | Asp | Leu | Cys | Gly | Arg | Arg | Arg |            |            |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     |            |            |     |

|            |   |     |
|------------|---|-----|
| aaccacgacg | t | 208 |
|------------|---|-----|

&lt;210&gt; 133

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Conus dalli

&lt;400&gt; 133

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Thr | Ser | Asp | Gly | Ala | Ser | Asp | Asp | Arg | Lys | Ala | Ala | Ala | Ser | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ile | Thr | Leu | Thr | Ile | Lys | Gly | Cys | Cys | Ser | Arg | Pro | Pro | Cys | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Asn | Asn | Pro | Asp | Leu | Cys | Gly | Arg | Arg | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     |

&lt;210&gt; 134

&lt;211&gt; 223

&lt;212&gt; DNA

&lt;213&gt; Conus dalli

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(192)

&lt;400&gt; 134

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| tcc | act | tca | ggg | cgt | cgt | gca | ttt | cat | ggc | agg | aat | gcc | gca | gcc | aaa | 96 |
| Ser | Thr | Ser | Gly | Arg | Arg | Ala | Phe | His | Gly | Arg | Asn | Ala | Ala | Ala | Lys |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| gcg | tct | gga | ctg | gtc | ggg | ctg | act | gac | agg | aga | cca | caa | tgc | tgt | agt | 144 |
| Ala | Ser | Gly | Leu | Val | Gly | Leu | Thr | Asp | Arg | Arg | Pro | Gln | Cys | Cys | Ser |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| gat | cct | cgc | tgt | aac | gta | ggg | cat | cca | gaa | ctt | tgt | ggg | gga | aga | cgc | 192 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

Asp Pro Arg Cys Asn Val Gly His Pro Glu Leu Cys Gly Gly Arg Arg  
 50 55 60

tgatgctcca ggaccctctg aaccacaacg t

223

<210> 135  
 <211> 64  
 <212> PRT  
 <213> Conus dalli

<400> 135  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Ser Thr Ser Gly Arg Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys  
 20 25 30

Ala Ser Gly Leu Val Gly Leu Thr Asp Arg Arg Pro Gln Cys Cys Ser  
 35 40 45

Asp Pro Arg Cys Asn Val Gly His Pro Glu Leu Cys Gly Gly Arg Arg  
 50 55 60

<210> 136  
 <211> 220  
 <212> DNA  
 <213> Conus dalli

<220>  
 <221> CDS  
 <222> (1)..(189)

<400> 136  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

tcc act tca ggt cgt gca ttt cat ggc agg aat gcc gca gcc aaa gcg 96  
 Ser Thr Ser Gly Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys Ala  
 20 25 30

tct ggc ctg gtc ggt ctg acc gac aag agg caa gta tgc tgt agt gat 144  
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Val Cys Cys Ser Asp  
 35 40 45

cct cgc tgt aac gta ggt cat cca gaa att tgt ggt gga aga cgc 189  
 Pro Arg Cys Asn Val Gly His Pro Glu Ile Cys Gly Gly Arg Arg  
 50 55 60

tgatgctcca ggaccctctg aaccacgacg t

220

<210> 137  
 <211> 63  
 <212> PRT  
 <213> Conus dalli

<400> 137  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Ser Thr Ser Gly Arg Ala Phe His Gly Arg Asn Ala Ala Ala Lys Ala

20 25 30  
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Val Cys Cys Ser Asp  
 35 40 45  
 Pro Arg Cys Asn Val Gly His Pro Glu Ile Cys Gly Gly Arg Arg  
 50 55 60

<210> 138  
 <211> 208  
 <212> DNA  
 <213> Conus achatinus

<220>  
 <221> CDS  
 <222> (1)..(180)

<400> 138  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg aca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser  
 1 5 10 15  
 ttc cct tca gat agt gca tct ggt ggc agg gat gac gag gcc aaa gac 96  
 Phe Pro Ser Asp Ser Ala Ser Gly Gly Arg Asp Asp Glu Ala Lys Asp  
 20 25 30  
 gaa agg tct gac atg tac gaa ttg aaa cgg aat gga cgc tgt tgc cat 144  
 Glu Arg Ser Asp Met Tyr Glu Leu Lys Arg Asn Gly Arg Cys Cys His  
 35 40 45  
 cct gcc tgt ggt ggc aaa tac gtt aaa tgt gga cgc tgatgctcca 190  
 Pro Ala Cys Gly Gly Lys Tyr Val Lys Cys Gly Arg  
 50 55 60  
 ggaccctctc gaaccacg 208

<210> 139  
 <211> 60  
 <212> PRT  
 <213> Conus achatinus

<400> 139  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Pro Ser Asp Ser Ala Ser Gly Gly Arg Asp Asp Glu Ala Lys Asp  
 20 25 30  
 Glu Arg Ser Asp Met Tyr Glu Leu Lys Arg Asn Gly Arg Cys Cys His  
 35 40 45  
 Pro Ala Cys Gly Gly Lys Tyr Val Lys Cys Gly Arg  
 50 55 60

<210> 140  
 <211> 211  
 <212> DNA  
 <213> Conus bullatus

<220>  
 <221> CDS

&lt;222&gt; (1)..(174)

&lt;400&gt; 140

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | tct | aca | gat | gat | gaa | tct | gat | ggc | tcg | aat | gaa | gaa | ccc | agc | gcc | 96 |
| Phe | Ser | Thr | Asp | Asp | Glu | Ser | Asp | Gly | Ser | Asn | Glu | Glu | Pro | Ser | Ala |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| gac | cag | act | gcc | agg | tcc | tca | atg | aac | agg | gcg | cct | gga | tgc | tgt | aac | 144 |
| Asp | Gln | Thr | Ala | Arg | Ser | Ser | Met | Asn | Arg | Ala | Pro | Gly | Cys | Cys | Asn |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|
| aat | cct | gcc | tgt | gtg | aag | cac | aga | tgt | gga | tgacgctgat | gctccaggac | 194 |
| Asn | Pro | Ala | Cys | Val | Lys | His | Arg | Cys | Gly |            |            |     |
|     | 50  |     |     |     |     | 55  |     |     |     |            |            |     |

|            |         |     |
|------------|---------|-----|
| cctctgaacc | acgacgt | 211 |
|------------|---------|-----|

&lt;210&gt; 141

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Conus bullatus

&lt;400&gt; 141

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Thr | Asp | Asp | Glu | Ser | Asp | Gly | Ser | Asn | Glu | Glu | Pro | Ser | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Gln | Thr | Ala | Arg | Ser | Ser | Met | Asn | Arg | Ala | Pro | Gly | Cys | Cys | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Pro | Ala | Cys | Val | Lys | His | Arg | Cys | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |

&lt;210&gt; 142

&lt;211&gt; 214

&lt;212&gt; DNA

&lt;213&gt; Conus bullatus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(177)

&lt;400&gt; 142

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttg | gca | acc | act | gtc | gtt | tcc | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Leu | Ala | Thr | Thr | Val | Val | Ser |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| ttc | tct | aca | gat | gat | gaa | tct | gat | ggc | tcg | aat | gaa | gaa | ccc | agc | gcc | 96 |
| Phe | Ser | Thr | Asp | Asp | Glu | Ser | Asp | Gly | Ser | Asn | Glu | Glu | Pro | Ser | Ala |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| gac | cag | gct | gcc | agg | tcc | gca | atg | aac | agg | ccg | cct | gga | tgc | tgt | aac | 144 |
| Asp | Gln | Ala | Ala | Arg | Ser | Ala | Met | Asn | Arg | Pro | Pro | Gly | Cys | Cys | Asn |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|
| aat | cct | gcc | tgt | gtg | aag | cac | aga | tgt | ggt | gga | tgacgctgat | gctccaggac | 197 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|

Asn Pro Ala Cys Val Lys His Arg Cys Gly Gly  
 50 55

cctctgaacc acgacgt

214

<210> 143  
 <211> 59  
 <212> PRT  
 <213> Conus bullatus

<400> 143  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Ser Thr Asp Asp Glu Ser Asp Gly Ser Asn Glu Glu Pro Ser Ala  
 20 25 30  
 Asp Gln Ala Ala Arg Ser Ala Met Asn Arg Pro Pro Gly Cys Cys Asn  
 35 40 45  
 Asn Pro Ala Cys Val Lys His Arg Cys Gly Gly  
 50 55

<210> 144  
 <211> 208  
 <212> DNA  
 <213> Conus bullatus

<220>  
 <221> CDS  
 <222> (1)..(177)

<400> 144  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc cct tca gat cgt gac tct gat ggc gcg gat gcc gaa gcc agt gac 96  
 Phe Pro Ser Asp Arg Asp Ser Asp Gly Ala Asp Ala Glu Ala Ser Asp  
 20 25 30  
 gag cct gtt gag ttc gaa agg gac gag aat gga tgc tgt tgg aat cct 144  
 Glu Pro Val Glu Phe Glu Arg Asp Glu Asn Gly Cys Cys Trp Asn Pro  
 35 40 45  
 tcc tgt ccg agg ccc aga tgt aca gga cga cgc taatgctcca ggaccctctg 197  
 Ser Cys Pro Arg Pro Arg Cys Thr Gly Arg Arg  
 50 55

aaccacgacg t

208

<210> 145  
 <211> 59  
 <212> PRT  
 <213> Conus bullatus

<400> 145  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Phe Pro Ser Asp Arg Asp Ser Asp Gly Ala Asp Ala Glu Ala Ser Asp

20                      25                      30  
 Glu Pro Val Glu Phe Glu Arg Asp Glu Asn Gly Cys Cys Trp Asn Pro  
           35                      40                      45  
 Ser Cys Pro Arg Pro Arg Cys Thr Gly Arg Arg  
       50                      55

<210> 146  
 <211> 211  
 <212> DNA  
 <213> Conus bullatus

<220>  
 <221> CDS  
 <222> (1)..(180)

<400> 146  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg aca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser  
       1                      5                      10                      15  
 ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gac 96  
 Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp  
           20                      25                      30  
 aaa gcg tct gac gtg gtc acg ctg gtc ctc aag gga tgc tgt tcc acc 144  
 Lys Ala Ser Asp Val Val Thr Leu Val Leu Lys Gly Cys Cys Ser Thr  
           35                      40                      45  
 cct ccc tgt gct gtg ctg tat tgt ggt aga aga cgc tgatgctcca 190  
 Pro Pro Cys Ala Val Leu Tyr Cys Gly Arg Arg Arg  
       50                      55                      60  
 ggaccctctg aaccacgacg t 211

<210> 147  
 <211> 60  
 <212> PRT  
 <213> Conus bullatus

<400> 147  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Thr Thr Thr Val Val Ser  
       1                      5                      10                      15  
 Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp  
           20                      25                      30  
 Lys Ala Ser Asp Val Val Thr Leu Val Leu Lys Gly Cys Cys Ser Thr  
           35                      40                      45  
 Pro Pro Cys Ala Val Leu Tyr Cys Gly Arg Arg Arg  
       50                      55                      60

<210> 148  
 <211> 212  
 <212> DNA  
 <213> Conus distans

<220>  
 <221> CDS

&lt;222&gt; (1)..(171)

&lt;400&gt; 148

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| atg | ttc | acc | gtg | ttt | ctg | ttg | gtt | gtc | ttc | gca | tcc | tct | gtc | acc | tta | 48 |
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Phe | Ala | Ser | Ser | Val | Thr | Leu |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| gat | cgt | gca | tct | tat | ggc | agg | tat | gcc | tca | ccc | gtc | gac | aga | gcg | tct | 96 |
| Asp | Arg | Ala | Ser | Tyr | Gly | Arg | Tyr | Ala | Ser | Pro | Val | Asp | Arg | Ala | Ser |    |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| gcc | ctg | atc | gct | cag | gcc | atc | ctt | cga | gat | tgc | tgc | tcc | aat | cct | cct | 144 |
| Ala | Leu | Ile | Ala | Gln | Ala | Ile | Leu | Arg | Asp | Cys | Cys | Ser | Asn | Pro | Pro |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|-----|
| tgt | gcc | cat | aat | aat | cca | gac | tgt | cgt | taaagacgct | gcttgctcca | 191 |
| Cys | Ala | His | Asn | Asn | Pro | Asp | Cys | Arg |            |            |     |
|     |     | 50  |     |     |     | 55  |     |     |            |            |     |

|            |            |   |     |
|------------|------------|---|-----|
| ggaccctctg | aaccacgacg | t | 212 |
|------------|------------|---|-----|

&lt;210&gt; 149

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Conus distans

&lt;400&gt; 149

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Thr | Val | Phe | Leu | Leu | Val | Val | Phe | Ala | Ser | Ser | Val | Thr | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Arg | Ala | Ser | Tyr | Gly | Arg | Tyr | Ala | Ser | Pro | Val | Asp | Arg | Ala | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Leu | Ile | Ala | Gln | Ala | Ile | Leu | Arg | Asp | Cys | Cys | Ser | Asn | Pro | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | His | Asn | Asn | Pro | Asp | Cys | Arg |
|     |     | 50  |     |     |     | 55  |     |     |

&lt;210&gt; 150

&lt;211&gt; 63

&lt;212&gt; DNA

&lt;213&gt; Conus textile

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(60)

&lt;400&gt; 150

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| gga | tgc | tgt | tct | aat | cct | ccc | tgt | atc | gcg | aag | aat | cca | cac | atg | tgt | 48 |
| Gly | Cys | Cys | Ser | Asn | Pro | Pro | Cys | Ile | Ala | Lys | Asn | Pro | His | Met | Cys |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |    |
|-----|-----|-----|-----|-----|----|
| ggt | gga | aga | cgc | tga | 63 |
| Gly | Gly | Arg | Arg |     |    |
|     |     | 20  |     |     |    |

&lt;210&gt; 151

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Conus textile

&lt;400&gt; 151

Gly Cys Cys Ser Asn Pro Pro Cys Ile Ala Lys Asn Pro His Met Cys  
 1 5 10 15

Gly Gly Arg Arg  
 20

&lt;210&gt; 152

&lt;211&gt; 220

&lt;212&gt; DNA

&lt;213&gt; Conus consors

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(189)

&lt;400&gt; 152

atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

ttc cct tca gat cgt gca tct gat ggc agg aat gcc gca gcc aac gac 96  
 Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp  
 20 25 30

aaa gcg tct gac gtg atc acg ctg gcc ctc aag gga tgc tgt tcc aac 144  
 Lys Ala Ser Asp Val Ile Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn  
 35 40 45

cct gtc tgt cac ttg gag cat tca aac ctt tgt ggt aga aga cgc 189  
 Pro Val Cys His Leu Glu His Ser Asn Leu Cys Gly Arg Arg Arg  
 50 55 60

tgatgctcca ggaccctctg aaccacgacg t 220

&lt;210&gt; 153

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Conus consors

&lt;400&gt; 153

Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Phe Pro Ser Asp Arg Ala Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp  
 20 25 30

Lys Ala Ser Asp Val Ile Thr Leu Ala Leu Lys Gly Cys Cys Ser Asn  
 35 40 45

Pro Val Cys His Leu Glu His Ser Asn Leu Cys Gly Arg Arg Arg  
 50 55 60

&lt;210&gt; 154

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Conus musicus

&lt;220&gt;

&lt;221&gt; PEPTIDE

&lt;222&gt; (4)..(12)



<223> Xaa at residues 4, 11 and 12 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr. Xaa at residue 6 is Pro or hydroxy-Pro.

<220>

<221> PEPTIDE

<222> (9)..(15)

<223> Xaa at residues 9, 10 and 15 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at residue 14 is Trp (D or L) or halo-Trp.

<400> 154

Gly Cys Cys Xaa Asn Xaa Val Cys Xaa Xaa Xaa Cys Xaa Xaa  
1 5 10 15

<210> 155

<211> 16

<212> PRT

<213> Conus purpurascens

<220>

<221> PEPTIDE

<222> (1)..(3)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa at residues 3 and 9 is Pro or hydroxy-Pro.

<220>

<221> PEPTIDE

<222> (13)

<223> Xaa at residue 13 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 155

Xaa Xaa Xaa Gly Cys Cys Arg His Xaa Ala Cys Gly Xaa Asn Arg Cys  
1 5 10 15

<210> 156

<211> 13

<212> PRT

<213> Conus musicus

<220>

<221> PEPTIDE

<222> (5)..(11)

<223> Xaa at residues 5 and 11 is Pro or hydroxy-Pro.

<400> 156

Cys Cys Ala Asp Xaa Asp Cys Arg Phe Arg Xaa Gly Cys  
1 5 10

<210> 157

<211> 17

<212> PRT

<213> Conus musicus

<220>

<221> PEPTIDE

<222> (4)..(13)

<223> Xaa at residues 4 and 13 is Tyr, nor-Tyr,

mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
O-phospho-Tyr or nitro-Tyr; Xaa at residues 6 and  
10 is Pro or hydroxy-Pro.

<220>  
<221> PEPTIDE  
<222> (9)..(17)  
<223> Xaa at residues 9 and 16 is Trp (D or L) or  
halo-Trp; Xaa at residues 11 and 17 is Lys,  
N-methyl-Lys, N,N-dimethyl-Lys or  
N,N,N-trimethyl-Lys.

<400> 157  
Gly Cys Cys Xaa Asn Xaa Ser Cys Xaa Xaa Xaa Thr Xaa Cys Ser Xaa  
1 5 10 15  
Xaa

<210> 158  
<211> 13  
<212> PRT  
<213> Conus musicus

<220>  
<221> PEPTIDE  
<222> (5)..(8)  
<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at  
residue 8 is Lys, N-methyl-Lys, N,N-dimethyl-Lys  
or N,N,N-trimethyl-Lys.

<220>  
<221> PEPTIDE  
<222> (9)..(11)  
<223> Xaa at residue 9 is Glu or gamma-carboxy-Glu; Xaa  
at residue 11 is Tyr, nor-Tyr, mono-halo-Tyr,  
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
nitro-Tyr.

<400> 158  
Cys Cys Ser Asn Xaa Thr Cys Xaa Xaa Thr Xaa Gly Cys  
1 5 10

<210> 159  
<211> 13  
<212> PRT  
<213> Conus musicus

<220>  
<221> PEPTIDE  
<222> (5)..(11)  
<223> Xaa at residues 5 and 11 is Pro or hydroxy-Pro;  
Xaa at residue 8 is Lys, N-methyl-Lys,  
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 159  
Cys Cys Ala Asn Xaa Ile Cys Xaa Asn Thr Xaa Gly Cys  
1 5 10

<210> 160  
<211> 13



<400> 162  
Gly Gly Cys Cys Ser Xaa Xaa Xaa Cys Ile Ala Ser Asn Xaa Xaa Cys  
1 5 10 15

```
<210> 163
<211> 15
<212> PRT
<213> Conus lividus
```

<400> 163  
Gly Cys Cys Ser His Xaa Val Cys Ser Ala Met Ser Xaa Ile Cys  
1 5 10 15

```
<220>
<221> PEPTIDE
<222> (4)..(12)
<223> Xaa at residues 4 and 12 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
residue 6 is Pro or hydroxy-Pro.
```

<400> 164  
Gly Cys Cys Xaa Asn Xaa Xaa Cys Gly Ala Ser Xaa Thr Xaa Cys  
1 5 10 15

```
<220>
<221> PEPTIDE
<222> (5)..(13)
<223> Xaa at residue 5 is Tyr, nor-Tyr, mono-halo-Tyr,
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or
nitro-Tyr; Xaa at residues 6, 7 and 13 is Pro or
hydroxy-Pro.
```

<400> 165  
Gly Cys Cys Ser Xaa Xaa Xaa Cys Phe Ala Thr Asn Xaa Asp Cys

1 5 10 15

<210> 166  
<211> 17  
<212> PRT  
<213> Conus radiatus

<220>  
<221> PEPTIDE  
<222> (6)..(14)  
<223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residues 7, 8 and 14 is Pro or hydroxy-Pro.

<400> 166  
Gly Gly Cys Cys Ser Xaa Xaa Xaa Cys Ile Ala Asn Asn Xaa Leu Cys  
1 5 10 15  
Ala

<210> 167  
<211> 17  
<212> PRT  
<213> Conus radiatus

<220>  
<221> PEPTIDE  
<222> (6)..(14)  
<223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residues 7, 8 and 14 is Pro or hydroxy-Pro.

<400> 167  
Gly Gly Cys Cys Ser Xaa Xaa Xaa Cys Ile Ala Asn Asn Xaa Phe Cys  
1 5 10 15  
Ala

<210> 168  
<211> 16  
<212> PRT  
<213> Conus virgo

<220>  
<221> PEPTIDE  
<222> (6)..(13)  
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 168  
Asp Cys Cys Ser Asn Xaa Xaa Cys Ser Gln Asn Asn Xaa Asp Cys Met  
1 5 10 15

<210> 169  
<211> 16  
<212> PRT  
<213> Conus virgo

```

<220>
<221> PEPTIDE
<222> (6)..(13)
<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro.

<400> 169
Asp Cys Cys Ser Asn Xaa Xaa Cys Ala His Asn Asn Xaa Asp Cys Arg
 1             5             10             15

<210> 170
<211> 20
<212> PRT
<213> Conus achatinus

<220>
<221> PEPTIDE
<222> (1)..(14)
<223> Xaa at residues 1, 11 and 14 is Glu or
gamma-carboxy-Glu; Xaa at residue 6 is Pro or
hydroxy-Pro.

<400> 170
Xaa Cys Cys Thr Asn Xaa Val Cys His Ala Xaa His Gln Xaa Leu Cys
 1             5             10             15

Ala Arg Arg Arg
      20

<210> 171
<211> 16
<212> PRT
<213> Conus achatinus

<220>
<221> PEPTIDE
<222> (6)..(10)
<223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at
residue 10 is Glu or gamma-carboxy-Glu.

<400> 171
Gly Cys Cys Ser Asn Xaa Val Cys His Leu Xaa His Ser Asn Leu Cys
 1             5             10             15

<210> 172
<211> 20
<212> PRT
<213> Conus achatinus

<220>
<221> PEPTIDE
<222> (1)..(14)
<223> Xaa at residues 1, 11 and 14 is Glu or
gamma-carboxy-Glu; Xaa at residue 6 is Pro or
hydroxy-Pro.

<400> 172
Xaa Cys Cys Thr Asn Xaa Val Cys His Val Xaa His Gln Xaa Leu Cys
 1             5             10             15

Ala Arg Arg Arg
      20

```

<210> 173  
 <211> 17  
 <212> PRT  
 <213> *Conus ammiralis*

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residues 2 and 15 is Glu or gamma-carboxy-Glu; Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<220>  
 <221> PEPTIDE  
 <222> (7)..(14)  
 <223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 173  
 Xaa Xaa Cys Cys Ser Xaa Xaa Ala Cys Asn Leu Asp His Xaa Xaa Leu  
       1                  5                  10                  15

Cys

<210> 174  
 <211> 18  
 <212> PRT  
 <213> *Conus ammiralis*

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residues 1, 7 and 14 is Pro or hydroxy-Pro; Xaa at residues 2 and 15 is Glu or gamma-carboxy-Glu.

<400> 174  
 Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Asn Ser Thr His Xaa Xaa Leu  
       1                  5                  10                  15

Cys Gly

<210> 175  
 <211> 21  
 <212> PRT  
 <213> *Conus arenatus*

<220>  
 <221> PEPTIDE  
 <222> (7)..(12)  
 <223> Xaa at residues 7 and 8 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residues 11 and 12 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>  
 <221> PEPTIDE  
 <222> (13)..(19)

<223> Xaa at residue 13 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residue 19 is Glu or gamma-carboxy-Glu.

<400> 175

Leu Asn Cys Cys Met Ile Xaa Xaa Cys Xaa Xaa Xaa Xaa Gly Asp Arg  
1 5 10 15

Cys Ser Xaa Val Arg  
20

<210> 176

<211> 22

<212> PRT

<213> Conus arenatus

<220>

<221> PEPTIDE

<222> (9)..(20)

<223> Xaa at residue 9 is Pro or hydroxy-Pro; Xaa at residues 12 and 20 is Glu or gamma-carboxy-Glu; Xaa at residue 14 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 176

Ala Phe Gly Cys Cys Asp Leu Ile Xaa Cys Leu Xaa Arg Xaa Gly Asn  
1 5 10 15

Arg Cys Asn Xaa Val His  
20

<210> 177

<211> 21

<212> PRT

<213> Conus arenatus

<220>

<221> PEPTIDE

<222> (8)..(16)

<223> Xaa at residue 8 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residues 12 and 16 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>

<221> PEPTIDE

<222> (11)..(19)

<223> Xaa at residues 11 and 19 is Glu or gamma-carboxy-Glu; Xaa at residue 13 is Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 177

Leu Gly Cys Cys Asn Val Thr Xaa Cys Xaa Xaa Xaa Xaa Gly Asp Xaa  
1 5 10 15

Cys Asn Xaa Val Arg  
20



<400> 180  
Gly Gly Cys Cys Ser His Xaa Val Cys Xaa Phe Asn Asn Xaa Gln Met  
1 5 10 15

Cys Arg

<210> 181  
 <211> 18  
 <212> PRT  
 <213> Conus aurisiacus

<220>  
 <221> PEPTIDE  
 <222> (7)..(14)  
 <223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 181  
 Gly Gly Cys Cys Ser His Xaa Val Cys Asn Leu Asn Asn Xaa Gln Met  
           1                  5                  10                  15

Cys Arg

<210> 182  
 <211> 17  
 <212> PRT  
 <213> Conus bandanus

<220>  
 <221> PEPTIDE  
 <222> (6)..(15)  
 <223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa  
           at residues 9 and 15 is Tyr, mono-halo-Tyr,  
           di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
           nitro-Tyr.

<400> 182  
 Gly Cys Cys Ser His Xaa Xaa Cys Xaa Ala Asn Asn Gln Ala Xaa Cys  
           1                  5                  10                  15

Asn

<210> 183  
 <211> 17  
 <212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE  
 <222> (7)..(15)  
 <223> Xaa at residues 7 and 14 is Pro and hydroxy-Pro;  
           Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 183  
 Gly Gly Cys Cys Ser His Xaa Ala Cys Ser Val Thr His Xaa Xaa Leu  
           1                  5                  10                  15

Cys

<210> 184  
 <211> 18

<212> PRT  
 <213> Conus betulinus

<220>  
 <221> PEPTIDE  
 <222> (6)..(12)  
 <223> Xaa at residue 6 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr; Xaa at residue 7 is Pro and hydroxy-Pro; Xaa at residue 12 is Glu or gamma-carboxy-Glu.

<400> 184  
 Gly Gly Cys Cys Ser Xaa Xaa Ala Cys Ser Val Xaa His Gln Asp Leu  
     1                    5                    10                    15

Cys Asp

<210> 185  
 <211> 25  
 <212> PRT  
 <213> Conus characteristicus

<220>  
 <221> PEPTIDE  
 <222> (8)..(22)  
 <223> Xaa at residues 8 and 22 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residue 13 is Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<220>  
 <221> PEPTIDE  
 <222> (15)..(19)  
 <223> Xaa at residues 15, 16 and 19 is Glu or gamma-carboxy-Glu.

<400> 185  
 Val Ser Cys Cys Val Val Arg Xaa Cys Xaa Ile Arg Xaa Gln Xaa Xaa  
     1                    5                    10                    15

Cys Leu Xaa Ala Asp Xaa Arg Thr Leu  
                     20                    25

<210> 186  
 <211> 21  
 <212> PRT  
 <213> Conus characteristicus

<220>  
 <221> PEPTIDE  
 <222> (1)..(19)  
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or L) or halo-Trp; Xaa at residues 11 and 19 is Glu or gamma-carboxy-Glu.

<220>  
 <221> PEPTIDE  
 <222> (12)..(16)

<223> Xaa at residues 12 and 16 is Lys, N-methyl-Lys, N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at residue 13 is Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or nitro-Tyr.

<400> 186

Xaa Asn Cys Cys Ser Ile Xaa Gly Cys Xaa Xaa Xaa Xaa Gly Asp Xaa  
1 5 10 15

Cys Ser Xaa Val Arg  
20

<210> 187

<211> 16

<212> PRT

<213> Conus catus

<220>

<221> PEPTIDE

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
Xaa at residue 11 is Glu or gamma-carboxy-Glu.

<400> 187

Gly Cys Cys Ser Asn Xaa Val Cys His Leu Xaa His Xaa Asn Ala Cys  
1 5 10 15

<210> 188

<211> 17

<212> PRT

<213> Conus catus

<220>

<221> PEPTIDE

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
Xaa at residue 9 is Tyr, nor-Tyr, mono-halo-Tyr,  
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
nitro-Tyr.

<400> 188

Gly Cys Cys Ser Asn Xaa Ile Cys Xaa Phe Asn Asn Xaa Arg Ile Cys  
1 5 10 15

Arg

<210> 189

<211> 17

<212> PRT

<213> Conus episcopatus

<220>

<221> PEPTIDE

<222> (1)..(14)

<223> Xaa at residues 1 and 14 is Glu or  
gamma-carboxy-Glu; Xaa at residues 6, 7 and 13 is  
Pro or hydroxy-Pro; Xaa at residue 10 is Trp (D or  
L) or halo-Trp.

<220>

<221> PEPTIDE

<222> (11)

<223> Xaa at residue 11 is Lys, N-methyl-Lys,  
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 189

Xaa Cys Cys Ser Gln Xaa Xaa Cys Arg Xaa Xaa His Xaa Xaa Leu Cys  
1 5 10 15

Ser

<210> 190

<211> 16

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (6)

<223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 190

Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Asn Asn Gln His Ile Cys  
1 5 10 15

<210> 191

<211> 18

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 191

Gly Cys Cys Ala Val Xaa Ser Cys Arg Leu Arg Asn Xaa Asp Leu Cys  
1 5 10 15

Gly Gly

<210> 192

<211> 16

<212> PRT

<213> Conus imperialis

<220>

<221> NP\_BIND

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 192

Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asn Asn Xaa His Ile Cys  
1 5 10 15

<210> 193

<211> 20

<212> PRT



<223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 196

Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Ser Asn Ala His Ile Cys  
1 5 10 15

<210> 197

<211> 17

<212> PRT

<213> Conus lividus

<220>

<221> PEPTIDE

<222> (1)..(7)

<223> Xaa at residue 1 is Glu or gamma-carboxy-Glu; Xaa  
at residue 7 is Pro or hydroxy-Pro.

<400> 197

Xaa Asp Cys Cys Ser Asp Xaa Arg Cys Ser Val Gly His Gln Asp Met  
1 5 10 15

Cys

<210> 198

<211> 16

<212> PRT

<213> Conus lividus

<220>

<221> PEPTIDE

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 198

Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Asn Asn Xaa His Ile Cys  
1 5 10 15

<210> 199

<211> 17

<212> PRT

<213> Conus lividus

<220>

<221> PEPTIDE

<222> (6)..(14)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
Xaa at residue 14 is Tyr, mono-halo-Tyr,  
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
nitro-Tyr.

<400> 199

Gly Cys Cys Gly Asn Xaa Ser Cys Ser Ile His Ile Xaa Xaa Val Cys  
1 5 10 15

Asn

<210> 200

<211> 21

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<220>
<221> PEPTIDE
<222> (2)..(15)
<223> Xaa at residues 2 and 12 is Lys, N-methyl-Lys,
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
residue 14 is Pro or hydroxy-Pro.
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<220>  
 <221> PEPTIDE  
 <222> (16)  
 <223> Xaa at residue 16 is Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 203  
 Gly Xaa Cys Cys Ile Asn Asp Ala Cys Arg Ser Xaa His Xaa Gln Xaa  
 1 5 10 15

Cys Ser

<210> 204  
 <211> 17  
 <212> PRT  
 <213> Conus musicus

<220>  
 <221> PEPTIDE  
 <222> (4)..(15)  
 <223> Xaa at residues 4 and 15 is Tyr, nor-Tyr,  
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
 O-phospho-Tyr or nitro-Tyr; Xaa at residue 13 is  
 Pro or hydroxy-Pro.

<400> 204  
 Gly Cys Cys Xaa Asn Ile Ala Cys Arg Ile Asn Asn Xaa Arg Xaa Cys  
 1 5 10 15

Arg

<210> 205  
 <211> 17  
 <212> PRT  
 <213> Conus obscurus

<220>  
 <221> PEPTIDE  
 <222> (6)..(15)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residues 12 and 15 is Tyr, nor-Tyr,  
 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
 O-phospho-Tyr or nitro-Tyr.

<220>  
 <221> PEPTIDE  
 <222> (14)  
 <223> Xaa at residue 14 is Lys, N-methyl-Lys,  
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 205  
 Gly Cys Cys Ser His Xaa Val Cys Arg Phe Asn Xaa Xaa Xaa Xaa Cys  
 1 5 10 15

Gly

<210> 206

<211> 18  
 <212> PRT  
 <213> Conus obscurus

<220>  
 <221> PEPTIDE  
 <222> (2)..(15)  
 <223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa  
 at residues 7, 8 and 14 is Pro or hydroxy-Pro; Xaa  
 at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr

<400> 206  
 Asp Xaa Cys Cys Ala Ser Xaa Xaa Cys Arg Leu Asn Asn Xaa Xaa Val  
     1                    5                    10                    15

Cys His

<210> 207  
 <211> 19  
 <212> PRT  
 <213> Conus obscurus

<220>  
 <221> PEPTIDE  
 <222> (6)..(18)  
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at  
 residue 9 is Trp (D or L) or halo-Trp; Xaa at  
 residues 14 and 18 is Glu or gamma-carboxy-Glu.

<220>  
 <221> PEPTIDE  
 <222> (15)  
 <223> Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 207  
 Gly Cys Cys Ser Asn Xaa Val Cys Xaa Gln Asn Asn Ala Xaa Xaa Cys  
     1                    5                    10                    15

Arg Xaa Ser

<210> 208  
 <211> 16  
 <212> PRT  
 <213> Conus obscurus

<220>  
 <221> PEPTIDE  
 <222> (6)..(15)  
 <223> Xaa at residues 6 and 7 is Pro or hydroxy-Pro; Xaa  
 at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 208  
 Gly Cys Cys Ser His Xaa Xaa Cys Ala Gln Asn Asn Gln Asp Xaa Cys  
     1                    5                    10                    15

```
<220>
<221> PEPTIDE
<222> (11)
<223> Xaa at residue 11 is Lys, N-methyl-Lys,
      N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.
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<400> 211  
 Xaa Cys Cys Ser Gln Xaa Xaa Cys Arg Xaa Xaa His Xaa Xaa Leu Cys  
 1 5 10 15

Ser

<210> 212  
 <211> 16  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 212  
 Gly Cys Cys Ser His Xaa Ala Cys Ala Gly Asn Asn Xaa His Ile Cys  
 1 5 10 15

<210> 213  
 <211> 16  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (6)..(15)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 15 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 213  
 Gly Cys Cys Ser Asp Xaa Ser Cys Asn Val Asn Asn Xaa Asp Xaa Cys  
 1 5 10 15

<210> 214  
 <211> 18  
 <212> PRT  
 <213> Conus omaria

<220>  
 <221> PEPTIDE  
 <222> (1)..(7)  
 <223> Xaa at residues 1 and 2 is Glu or  
 gamma-carboxy-Glu; Xaa at residue 7 is Pro or  
 hydroxy-Pro.

<400> 214  
 Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Ser Val Gly His Gln Asp Met  
 1 5 10 15

Cys Arg

<210> 215  
 <211> 17  
 <212> PRT

<213> Conus purpurascens

<220>

<221> PEPTIDE

<222> (7)..(15)

<223> Xaa at residue 7 is Pro or hydroxy-Pro; Xaa at residue 15 is Glu or gamma-carboxy-Glu.

<400> 215

Gly Gly Cys Cys Ser Asn Xaa Ala Cys Leu Val Asn His Leu Xaa Met  
1 5 10 15

Cys

<210> 216

<211> 18

<212> PRT

<213> Conus purpurascens

<220>

<221> PEPTIDE

<222> (3)..(15)

<223> Xaa at residues 3, 8 and 15 is Pro or hydroxy-Pro.

<400> 216

Arg Asp Xaa Cys Cys Phe Asn Xaa Ala Cys Asn Val Asn Asn Xaa Gln  
1 5 10 15

Ile Cys

<210> 217

<211> 21

<212> PRT

<213> Conus purpurascens

<220>

<221> PEPTIDE

<222> (5)..(8)

<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at residue 8 is Trp (D or L) or halo-Trp.

<400> 217

Cys Cys Ser Asp Xaa Ser Cys Xaa Arg Leu His Ser Leu Ala Cys Thr  
1 5 10 15

Gly Ile Val Asn Arg  
20

<210> 218

<211> 16

<212> PRT

<213> Conus purpurascens

<220>

<221> PEPTIDE

<222> (5)

<223> Xaa at residue 5 is Pro or hydroxy-Pro.

<400> 218

Cys Cys Thr Asn Xaa Ala Cys Leu Val Asn Asn Ile Arg Phe Cys Gly  
 1 5 10 15

<210> 219  
 <211> 18  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (2)..(7)  
 <223> Xaa at residue 2 is Glu or gamma-carboxy-Glu; Xaa  
 at residue 7 is Pro or hydroxy-Pro.

<400> 219  
 Asp Xaa Cys Cys Ser Asp Xaa Arg Cys His Gly Asn Asn Arg Asp His  
 1 5 10 15

Cys Ala

<210> 220  
 <211> 17  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 220  
 Asp Cys Cys Ser His Xaa Leu Cys Arg Leu Phe Val Xaa Gly Leu Cys  
 1 5 10 15

Ile

<210> 221  
 <211> 17  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 9 is Lys, N-methyl-Lys,  
 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<220>  
 <221> PEPTIDE  
 <222> (12)  
 <223> Xaa at residue 12 is Tyr, nor-Tyr, mono-halo-Tyr,  
 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
 nitro-Tyr.

<400> 221  
 Gly Cys Cys Ser His Xaa Val Cys Xaa Val Arg Xaa Xaa Asp Leu Cys  
 1 5 10 15

Arg

<210> 222  
 <211> 16  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 222  
 Gly Cys Cys Ser His Xaa Ala Cys Asn Val Asn Asn Xaa His Ile Cys  
           1                          5                          10                          15

<210> 223  
 <211> 16  
 <212> PRT  
 <213> Conus regius

<220>  
 <221> PEPTIDE  
 <222> (6)..(12)  
 <223> Xaa at residue 6 is Pro or hydroxy-Pro; Xaa at  
           residue 12 is Tyr, nor-Tyr, nor-Tyr,  
           mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
           O-phospho-Tyr or nitro-Tyr.

<220>  
 <221> PEPTIDE  
 <222> (9)  
 <223> Xaa at residue 9 is Lys, N-methyl-Lys,  
           N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 223  
 Gly Cys Cys Ser His Xaa Val Cys Xaa Val Arg Xaa Ser Asp Met Cys  
           1                          5                          10                          15

<210> 224  
 <211> 17  
 <212> PRT  
 <213> Conus stercusmuscarum

<220>  
 <221> PEPTIDE  
 <222> (7)..(14)  
 <223> Xaa at residues 7 and 14 is Pro or hydroxy-Pro;  
           Xaa at residue 10 is Lys, N-methyl-Lys,  
           N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 224  
 Gly Gly Cys Cys Ser His Xaa Ala Cys Xaa Val His Phe Xaa His Ser  
           1                          5                          10                          15

Cys

&lt;210&gt; 225

<211> 20  
 <212> PRT  
 <213> Conus stercusmuscarum

<220>  
 <221> PEPTIDE  
 <222> (6)..(14)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro;  
 Xaa at residue 14 is Glu or gamma-carboxy-Glu.

<400> 225  
 Val Cys Cys Ser Asn Xaa Val Cys His Val Asp His Xaa Xaa Leu Cys  
           1                  5                  10                  15

Arg Arg Arg Arg  
                   20

<210> 226  
 <211> 17  
 <212> PRT  
 <213> Conus striatus

<220>  
 <221> PEPTIDE  
 <222> (6)..(13)  
 <223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 226  
 Gly Cys Cys Ser His Xaa Val Cys Asn Leu Ser Asn Xaa Gln Ile Cys  
           1                  5                  10                  15

Arg

<210> 227  
 <211> 18  
 <212> PRT  
 <213> Conus textile

<220>  
 <221> PEPTIDE  
 <222> (1)..(15)  
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at  
 residues 2 and 15 is Glu or gamma-carboxy-Glu; Xaa  
 at residues 7 and 14 is Pro or hydroxy-Pro.

<400> 227  
 Xaa Xaa Cys Cys Ser His Xaa Ala Cys Asn Val Asp His Xaa Xaa Ile  
           1                  5                  10                  15

Cys Arg

<210> 228  
 <211> 17  
 <212> PRT  
 <213> Conus tulipa

<220>  
 <221> PEPTIDE  
 <222> (6)



<223> Xaa at residue 6 is Pro or hydroxy-Pro.

<400> 228

Gly Cys Cys Ser Asn Xaa Ala Cys Leu Val Asn His Ile Arg Phe Cys  
1 5 10 15

Gly

<210> 229

<211> 17

<212> PRT

<213> Conus virgo

<220>

<221> PEPTIDE

<222> (6)..(13)

<223> Xaa at residues 6 and 13 is Pro or hydroxy-Pro.

<400> 229

Asp Cys Cys Asp Asp Xaa Ala Cys Thr Val Asn Asn Xaa Gly Leu Cys  
1 5 10 15

Thr

<210> 230

<211> 20

<212> PRT

<213> Conus textile

<220>

<221> PEPTIDE

<222> (6)..(13)

<223> Xaa at residues 6, 7 and 13 is Pro or hydroxy-Pro;  
Xaa at residue 11 is Lys, N-methyl-Lys,  
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 230

Gly Cys Cys Ser Asn Xaa Xaa Cys Ile Ala Xaa Asn Xaa His Met Cys  
1 5 10 15

Gly Gly Arg Arg  
20

<210> 231

<211> 18

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (5)..(9)

<223> Xaa at residue 5 is Pro or hydroxy-Pro; Xaa at  
residue 8 is Tyr, nor-Tyr, mono-halo-Tyr,  
di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr or  
nitro-Tyr; Xaa at residue 9 is Glu or  
gamma-carboxy-Glu.

<220>

<221> PEPTIDE

<222> (10)..(14)

<223> Xaa at residues 10, 11, 12 and 14 is Lys,  
N-methyl-Lys, N,N-dimethyl-Lys or  
N,N,N-trimethyl-Lys.

<400> 231

Cys Cys Thr Ile Xaa Ser Cys Xaa Xaa Xaa Xaa Xaa Ile Xaa Ala Cys  
1 5 10 15

Val Phe

<210> 232

<211> 18

<212> PRT

<213> Conus regius

<220>

<221> PEPTIDE

<222> (6)..(16)

<223> Xaa at residues 6 and 16 is Pro or hydroxy-Pro;  
Xaa at residue 13 is Lys, N-methyl-Lys,  
N,N-dimethyl-Lys or N,N,N-trimethyl-Lys.

<400> 232

Gly Cys Cys Gly Asn Xaa Ala Cys Ser Gly Ser Ser Xaa Asp Ala Xaa  
1 5 10 15

Ser Cys

<210> 233

<211> 108

<212> DNA

<213> Conus imperialis

<220>

<221> CDS

<222> (1)..(105)

<400> 233

tct gat gga aag agt gcc gcg gcc aaa gcc aaa ccg tct cac ctg acg 48  
Ser Asp Gly Lys Ser Ala Ala Ala Lys Ala Lys Pro Ser His Leu Thr  
1 5 10 15

gct cca ttc atc agg gac gaa tgc tgt tcc gat tct cgc tgt ggc aag 96  
Ala Pro Phe Ile Arg Asp Glu Cys Cys Ser Asp Ser Arg Cys Gly Lys  
20 25 30

aac tgt ctt tga 108  
Asn Cys Leu  
35

<210> 234

<211> 35

<212> PRT

<213> Conus imperialis

<400> 234

Ser Asp Gly Lys Ser Ala Ala Ala Lys Ala Lys Pro Ser His Leu Thr  
1 5 10 15

Ala Pro Phe Ile Arg Asp Glu Cys Cys Ser Asp Ser Arg Cys Gly Lys  
                   20                  25                  30

Asn Cys Leu  
           35

<210> 235  
 <211> 108  
 <212> DNA  
 <213> Conus imperialis

<220>  
 <221> CDS  
 <222> (1)..(105)

<400> 235  
 ttt gat gga agg aat gcc cca gcc gac gac aaa gcg tct gac ctg atc 48  
 Phe Asp Gly Arg Asn Ala Pro Ala Asp Asp Lys Ala Ser Asp Leu Ile  
   1                  5                  10                  15  
 gct caa atc gtc agg aga gca tgc tgt tcc gat cgt cgc tgt aga tgg 96  
 Ala Gln Ile Val Arg Arg Ala Cys Cys Ser Asp Arg Arg Cys Arg Trp  
                   20                  25                  30  
 agg tgt ggt tga 108  
 Arg Cys Gly  
           35

<210> 236  
 <211> 35  
 <212> PRT  
 <213> Conus imperialis

<400> 236  
 Phe Asp Gly Arg Asn Ala Pro Ala Asp Asp Lys Ala Ser Asp Leu Ile  
   1                  5                  10                  15  
 Ala Gln Ile Val Arg Arg Ala Cys Cys Ser Asp Arg Arg Cys Arg Trp  
                   20                  25                  30  
 Arg Cys Gly  
           35

<210> 237  
 <211> 145  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS  
 <222> (1)..(105)

<400> 237  
 tct gat gga agg aat gcc gca gcc gac gcc aga gcg tct ccc cgg atc 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asp Ala Arg Ala Ser Pro Arg Ile  
   1                  5                  10                  15  
 gct ctt ttc ctc agg ttc aca tgc tgt agg aga ggt acc tgt tcc cag 96  
 Ala Leu Phe Leu Arg Phe Thr Cys Cys Arg Arg Gly Thr Cys Ser Gln  
                   20                  25                  30

cac tgt ggt tgaagacact gctgctccag gaccctctga accacgacgt  
His Cys Gly  
35

145

<210> 238  
<211> 35  
<212> PRT  
<213> Conus regius

<400> 238  
Ser Asp Gly Arg Asn Ala Ala Ala Asp Ala Arg Ala Ser Pro Arg Ile  
1 5 10 15

Ala Leu Phe Leu Arg Phe Thr Cys Cys Arg Arg Gly Thr Cys Ser Gln  
20 25 30

His Cys Gly  
35

<210> 239  
<211> 145  
<212> DNA  
<213> Conus regius

<220>  
<221> CDS  
<222> (1)..(105)

<400> 239  
tct aat gga agg aat gcc gca gcc gac gcc aaa gcg tct caa cgg atc 48  
Ser Asn Gly Arg Asn Ala Ala Ala Asp Ala Lys Ala Ser Gln Arg Ile  
1 5 10 15

gct cca ttc ctc agg gac tat tgc tgt agg aga cat gcc tgt acg ttg 96  
Ala Pro Phe Leu Arg Asp Tyr Cys Cys Arg Arg His Ala Cys Thr Leu  
20 25 30

att tgt ggt tgaagacgct gctgctccag gaccctctga accacgacgt 145  
Ile Cys Gly  
35

<210> 240  
<211> 35  
<212> PRT  
<213> Conus regius

<400> 240  
Ser Asn Gly Arg Asn Ala Ala Ala Asp Ala Lys Ala Ser Gln Arg Ile  
1 5 10 15

Ala Pro Phe Leu Arg Asp Tyr Cys Cys Arg Arg His Ala Cys Thr Leu  
20 25 30

Ile Cys Gly  
35

<210> 241  
<211> 145  
<212> DNA  
<213> Conus regius

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(105)

&lt;400&gt; 241

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| tct | aat | gga | agg | aat | gcc | gca | gcc | gac | gcc | aaa | gcg | tct | caa | cgg | atc | 48 |
| Ser | Asn | Gly | Arg | Asn | Ala | Ala | Ala | Asp | Ala | Lys | Ala | Ser | Gln | Arg | Ile |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| gct | cca | ttc | ctc | agg | gac | tat | tgc | tgt | agg | aga | cct | ccc | tgt | acg | ttg | 96 |
| Ala | Pro | Phe | Leu | Arg | Asp | Tyr | Cys | Cys | Arg | Arg | Pro | Pro | Cys | Thr | Leu |    |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| att | tgt | ggt | tga | gac | gct | gct | gcc | gac | gac | cct | ctg | acc | cac | gac | gct | 145 |
| Ile | Cys | Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 242

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Conus regius

&lt;400&gt; 242

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Asn | Gly | Arg | Asn | Ala | Ala | Ala | Asp | Ala | Lys | Ala | Ser | Gln | Arg | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Pro | Phe | Leu | Arg | Asp | Tyr | Cys | Cys | Arg | Arg | Pro | Pro | Cys | Thr | Leu |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |

|     |     |     |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|-----|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Ile | Cys | Gly |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     |     | 35  |  |  |  |  |  |  |  |  |  |  |  |  |  |

&lt;210&gt; 243

&lt;211&gt; 136

&lt;212&gt; DNA

&lt;213&gt; Conus regius

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(96)

&lt;400&gt; 243

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| tct | aat | aaa | agg | aag | aat | gcc | gca | atg | ctt | gac | atg | atc | gct | caa | cac | 48 |
| Ser | Asn | Lys | Arg | Lys | Asn | Ala | Ala | Met | Leu | Asp | Met | Ile | Ala | Gln | His |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| gcc | ata | agg | ggt | tgc | tgt | tcc | gat | cct | cg  | tgt | aga | tat | aga | tgt | cgt | 96 |
| Ala | Ile | Arg | Gly | Cys | Cys | Ser | Asp | Pro | Arg | Cys | Arg | Tyr | Arg | Cys | Arg |    |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|-----|
| tga | gac | gct | gct | gcc | gac | cct | ctg | acc | cac | gac | gct |  |  |  |  | 136 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|-----|

&lt;210&gt; 244

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Conus regius

&lt;400&gt; 244

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Asn | Lys | Arg | Lys | Asn | Ala | Ala | Met | Leu | Asp | Met | Ile | Ala | Gln | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Arg Tyr Arg Cys Arg  
 20 25 30

<210> 245  
 <211> 145  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS  
 <222> (1)..(105)

<400> 245  
 ttt aat gga agg agt gcc gca gcc gac caa aat gcg cct ggc ctg atc 48  
 Phe Asn Gly Arg Ser Ala Ala Ala Asp Gln Asn Ala Pro Gly Leu Ile  
 1 5 10 15

gct caa gtc gtc aga gga ggg tgc tgt tcc gat ccc cgc tgc gcc tgg 96  
 Ala Gln Val Val Arg Gly Gly Cys Cys Ser Asp Pro Arg Cys Ala Trp  
 20 25 30

aga tgt ggt tgaagacgtt gctgctccag gaccctctga accacgacgt 145  
 Arg Cys Gly  
 35

<210> 246  
 <211> 35  
 <212> PRT  
 <213> Conus regius

<400> 246  
 Phe Asn Gly Arg Ser Ala Ala Ala Asp Gln Asn Ala Pro Gly Leu Ile  
 1 5 10 15

Ala Gln Val Val Arg Gly Gly Cys Cys Ser Asp Pro Arg Cys Ala Trp  
 20 25 30

Arg Cys Gly  
 35

<210> 247  
 <211> 145  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS  
 <222> (1)..(105)

<400> 247  
 ttt gat gga agg aat gcc gca gcc gac gcc aaa gtg att aac acg gtc 48  
 Phe Asp Gly Arg Asn Ala Ala Ala Asp Ala Lys Val Ile Asn Thr Val  
 1 5 10 15

gct cga atc gcc tgg gat ata tgc tgt tcc gaa cct gac tgt aac cat 96  
 Ala Arg Ile Ala Trp Asp Ile Cys Cys Ser Glu Pro Asp Cys Asn His  
 20 25 30

aaa tgt gtt tgaagacgct tctgctccag gaccctctga accacgacgt 145  
 Lys Cys Val  
 35

<210> 248  
 <211> 35  
 <212> PRT  
 <213> Conus regius

<400> 248  
 Phe Asp Gly Arg Asn Ala Ala Ala Asp Ala Lys Val Ile Asn Thr Val  
           1                  5                  10                  15  
 Ala Arg Ile Ala Trp Asp Ile Cys Cys Ser Glu Pro Asp Cys Asn His  
                   20                  25                  30  
 Lys Cys Val  
                   35

<210> 249  
 <211> 136  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS  
 <222> (1)..(96)

<400> 249  
 tct aat aaa agg aag aat gcc gca atg ctt gac atg atc gct caa cac 48  
 Ser Asn Lys Arg Lys Asn Ala Ala Met Leu Asp Met Ile Ala Gln His  
           1                  5                  10                  15  
 gcc ata agg ggt tgc tgt tcc gat cct cgc tgt aaa cat cag tgt ggt 96  
 Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Lys His Gln Cys Gly  
                   20                  25                  30  
 tgaagacgct gctgctccag gaccctctga accacgacgt 136

<210> 250  
 <211> 32  
 <212> PRT  
 <213> Conus regius

<400> 250  
 Ser Asn Lys Arg Lys Asn Ala Ala Met Leu Asp Met Ile Ala Gln His  
           1                  5                  10                  15  
 Ala Ile Arg Gly Cys Cys Ser Asp Pro Arg Cys Lys His Gln Cys Gly  
                   20                  25                  30

<210> 251  
 <211> 136  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(105)

<400> 251  
 atc aag aat aca gca gcc agc aac aaa gcg tct agc ctg gtg gct ctt 48  
 Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Ser Ser Leu Val Ala Leu  
           1                  5                  10                  15

gtt gtc agg gga tgc tgt tac aat cct gtc tgc aag aaa tat tat tgt 96  
 Val Val Arg Gly Cys Cys Tyr Asn Pro Val Cys Lys Lys Tyr Tyr Cys  
                   20                  25                  30

tgg aaa ggc tgatgctcca ggaccctctg aaccacgacg t 136  
 Trp Lys Gly  
                   35

<210> 252  
 <211> 35  
 <212> PRT  
 <213> Conus musicus

<400> 252  
 Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Ser Ser Leu Val Ala Leu  
      1                  5                  10                  15

Val Val Arg Gly Cys Cys Tyr Asn Pro Val Cys Lys Lys Tyr Tyr Cys  
                   20                  25                  30

Trp Lys Gly  
                   35

<210> 253  
 <211> 148  
 <212> DNA  
 <213> Conus purpurascens

<220>  
 <221> CDS  
 <222> (1)..(117)

<400> 253  
 tct gaa ggc agg aat gct gaa gcc atc gac aac gcc tta gac cag agg 48  
 Ser Glu Gly Arg Asn Ala Glu Ala Ile Asp Asn Ala Leu Asp Gln Arg  
      1                  5                  10                  15

gat cca aag cga cag gag ccg ggg tgc tgt agg cat cct gcc tgt ggg 96  
 Asp Pro Lys Arg Gln Glu Pro Gly Cys Cys Arg His Pro Ala Cys Gly  
                   20                  25                  30

aag aac aga tgt gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 148  
 Lys Asn Arg Cys Gly Arg Arg  
                   35

<210> 254  
 <211> 39  
 <212> PRT  
 <213> Conus purpurascens

<400> 254  
 Ser Glu Gly Arg Asn Ala Glu Ala Ile Asp Asn Ala Leu Asp Gln Arg  
      1                  5                  10                  15

Asp Pro Lys Arg Gln Glu Pro Gly Cys Cys Arg His Pro Ala Cys Gly  
                   20                  25                  30

Lys Asn Arg Cys Gly Arg Arg  
                   35



<210> 255  
 <211> 156  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(102)

<400> 255  
 tct gat ggc agg aat att gca gtc gac gac aga tgg tct ttc tat acg 48  
 Ser Asp Gly Arg Asn Ile Ala Val Asp Asp Arg Trp Ser Phe Tyr Thr  
 1 5 10 15  
 ctc ttc cat gct act tgc tgt gcc gat cct gac tgt aga ttc cgg ccc 96  
 Leu Phe His Ala Thr Cys Cys Ala Asp Pro Asp Cys Arg Phe Arg Pro  
 20 25 30  
 ggt tgt tgatctttgt tcttcaaaga cgctgctggc ccaggaccct ctgaaccacg 152  
 Gly Cys  
 acgt 156

<210> 256  
 <211> 34  
 <212> PRT  
 <213> Conus musicus

<400> 256  
 Ser Asp Gly Arg Asn Ile Ala Val Asp Asp Arg Trp Ser Phe Tyr Thr  
 1 5 10 15  
 Leu Phe His Ala Thr Cys Cys Ala Asp Pro Asp Cys Arg Phe Arg Pro  
 20 25 30  
 Gly Cys

<210> 257  
 <211> 142  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(102)

<400> 257  
 atc aag aat act gca gcc agc aac aaa gcg cct agc ctg gtg gct att 48  
 Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Pro Ser Leu Val Ala Ile  
 1 5 10 15  
 gcc gtc agg gga tgc tgt tac aat cct tcc tgt tgg ccg aaa aca tat 96  
 Ala Val Arg Gly Cys Cys Tyr Asn Pro Ser Cys Trp Pro Lys Thr Tyr  
 20 25 30  
 tgt agt tggaaaggct gatgctccag gaccctctga accacgaagt 142  
 Cys Ser

<210> 258  
 <211> 34

<212> PRT  
 <213> Conus musicus

<400> 258  
 Ile Lys Asn Thr Ala Ala Ser Asn Lys Ala Pro Ser Leu Val Ala Ile  
           1                  5                  10                  15  
 Ala Val Arg Gly Cys Cys Tyr Asn Pro Ser Cys Trp Pro Lys Thr Tyr  
                   20                  25                  30  
 Cys Ser

<210> 259  
 <211> 161  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(108)

<400> 259  
 tct gat agc agg aat gtc gca atc gag gac aga gtg tct gac ctg cac 48  
 Ser Asp Ser Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu His  
           1                  5                  10                  15  
 tct atg ttc ttc gat gtt tct tgc tgt agc aat cct acc tgt aaa gaa 96  
 Ser Met Phe Phe Asp Val Ser Cys Cys Ser Asn Pro Thr Cys Lys Glu  
                   20                  25                  30  
 acg tat ggt tgt tgatcggttg ttttgaagac gctgatgctc caggaccctc 148  
 Thr Tyr Gly Cys  
                   35  
 tgaaccacga cgt 161

<210> 260  
 <211> 36  
 <212> PRT  
 <213> Conus musicus

<400> 260  
 Ser Asp Ser Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu His  
           1                  5                  10                  15  
 Ser Met Phe Phe Asp Val Ser Cys Cys Ser Asn Pro Thr Cys Lys Glu  
                   20                  25                  30  
 Thr Tyr Gly Cys  
                   35

<210> 261  
 <211> 156  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(102)

<400> 261  
 tct gtt ggc agg aat att gca gtc gac gac aga ggg att ttc tct acg 48  
 Ser Val Gly Arg Asn Ile Ala Val Asp Arg Gly Ile Phe Ser Thr  
 1 5 10 15  
 ctc ttc cat gct cat tgc tgt gcc aat ccc atc tgt aaa aac acg ccc 96  
 Leu Phe His Ala His Cys Cys Ala Asn Pro Ile Cys Lys Asn Thr Pro  
 20 25 30  
 ggt tgt tgatctttgt tcttcaaga cgctgctggc ccaggaccct ctgaaccacg 152  
 Gly Cys  
 acgt 156

<210> 262  
 <211> 34  
 <212> PRT  
 <213> Conus musicus

<400> 262  
 Ser Val Gly Arg Asn Ile Ala Val Asp Asp Arg Gly Ile Phe Ser Thr  
 1 5 10 15  
 Leu Phe His Ala His Cys Cys Ala Asn Pro Ile Cys Lys Asn Thr Pro  
 20 25 30  
 Gly Cys

<210> 263  
 <211> 161  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(108)

<400> 263  
 tcc gat ggc agg aat gtc gca atc gac gac aga gtg tct gac ctg cac 48  
 Ser Asp Gly Arg Asn Val Ala Ile Asp Asp Arg Val Ser Asp Leu His  
 1 5 10 15  
 tct atg ttc ttc gat att gct tgc tgt aac aat cct acc tgt aaa gaa 96  
 Ser Met Phe Phe Asp Ile Ala Cys Cys Asn Asn Pro Thr Cys Lys Glu  
 20 25 30  
 acg tat ggt tgt tgatcgttgg ttttgaagac gctgatgctc caggaccctc 148  
 Thr Tyr Gly Cys  
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 tgaaccacga cgt 161

<210> 264  
 <211> 36  
 <212> PRT  
 <213> Conus musicus

<400> 264  
 Ser Asp Gly Arg Asn Val Ala Ile Asp Asp Arg Val Ser Asp Leu His  
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Ser Met Phe Phe Asp Ile Ala Cys Cys Asn Asn Pro Thr Cys Lys Glu  
                   20                                  25                                  30

Thr Tyr Gly Cys  
                   35

<210> 265  
 <211> 161  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(108)

<400> 265  
 tct gat ggc agg aat gtc gca atc gag gac aga gtg tct gac ctg ctc 48  
 Ser Asp Gly Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu Leu  
   1                                  5                                  10                                  15  
  
 tct atg ctc ttc gat gtt gct tgc tgt agc aat cct gtc tgt aaa gaa 96  
 Ser Met Leu Phe Asp Val Ala Cys Cys Ser Asn Pro Val Cys Lys Glu  
                   20                                  25                                  30  
  
 acg tat ggt tgt tgatcggttg ttttgaagac gctgatgctc caggaccctc 148  
 Thr Tyr Gly Cys  
                   35  
  
 tgaaccacga cgt 161

<210> 266  
 <211> 36  
 <212> PRT  
 <213> Conus musicus

<400> 266  
 Ser Asp Gly Arg Asn Val Ala Ile Glu Asp Arg Val Ser Asp Leu Leu  
   1                                  5                                  10                                  15  
  
 Ser Met Leu Phe Asp Val Ala Cys Cys Ser Asn Pro Val Cys Lys Glu  
                   20                                  25                                  30  
  
 Thr Tyr Gly Cys  
                   35

<210> 267  
 <211> 154  
 <212> DNA  
 <213> Conus betulinus

<220>  
 <221> CDS  
 <222> (1)..(123)

<400> 267  
 tat gat ggc agg aat gct gcc gcc gac gac aaa gct ttt gac ctg ctg 48  
 Tyr Asp Gly Arg Asn Ala Ala Ala Asp Asp Lys Ala Phe Asp Leu Leu  
   1                                  5                                  10                                  15  
  
 gct atg acc ata agg gga gga tgc tgt tcc tat cct ccc tgt atc gcg 96  
 Ala Met Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala

20 25 30  
 agt aat cct aaa tgt ggt gga aga cgc tgatgctcca ggaccctctg 143  
 Ser Asn Pro Lys Cys Gly Gly Arg Arg  
 35 40

aaccacaacg t 154

<210> 268  
 <211> 41  
 <212> PRT  
 <213> Conus betulinus

<400> 268  
 Tyr Asp Gly Arg Asn Ala Ala Ala Asp Asp Lys Ala Phe Asp Leu Leu  
 1 5 10 15

Ala Met Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala  
 20 25 30

Ser Asn Pro Lys Cys Gly Gly Arg Arg  
 35 40

<210> 269  
 <211> 151  
 <212> DNA  
 <213> Conus lividus

<220>  
 <221> CDS  
 <222> (1)..(111)

<400> 269  
 ttt gat ggc agg aat gct gca ggc aac gcc aaa atg tcc gcc ctg atg 48  
 Phe Asp Gly Arg Asn Ala Ala Gly Asn Ala Lys Met Ser Ala Leu Met  
 1 5 10 15

gcc ctg acc atc agg gga tgc tgt tcc cat cct gtc tgt agc gcg atg 96  
 Ala Leu Thr Ile Arg Gly Cys Cys Ser His Pro Val Cys Ser Ala Met  
 20 25 30

agt cca atc tgt ggc tgaagacgct gatgccccag gaccctctga accacgacgt 151  
 Ser Pro Ile Cys Gly  
 35

<210> 270  
 <211> 37  
 <212> PRT  
 <213> Conus lividus

<400> 270  
 Phe Asp Gly Arg Asn Ala Ala Gly Asn Ala Lys Met Ser Ala Leu Met  
 1 5 10 15

Ala Leu Thr Ile Arg Gly Cys Cys Ser His Pro Val Cys Ser Ala Met  
 20 25 30

Ser Pro Ile Cys Gly  
 35

<210> 271  
 <211> 196  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(165)

<400> 271  
 atc aag aat gct gca gct gac gac aaa gca tct gac ctg ctc tct cag 48  
 Ile Lys Asn Ala Ala Ala Asp Asp Lys Ala Ser Asp Leu Leu Ser Gln  
 1 5 10 15  
 atc gtc agg aat gct gca tcc aat gac aaa ggg tct gac ctg atg act 96  
 Ile Val Arg Asn Ala Ala Ser Asn Asp Lys Gly Ser Asp Leu Met Thr  
 20 25 30  
 ctt gcc ctc agg gga tgc tgt aaa aat cct tac tgt ggt gcg tcg aaa 144  
 Leu Ala Leu Arg Gly Cys Cys Lys Asn Pro Tyr Cys Gly Ala Ser Lys  
 35 40 45  
 aca tat tgt ggt aga aga cgc tgatgctcca ggaccctctg aaccacgacg t 196  
 Thr Tyr Cys Gly Arg Arg Arg  
 50 55

<210> 272  
 <211> 55  
 <212> PRT  
 <213> Conus musicus

<400> 272  
 Ile Lys Asn Ala Ala Ala Asp Asp Lys Ala Ser Asp Leu Leu Ser Gln  
 1 5 10 15  
 Ile Val Arg Asn Ala Ala Ser Asn Asp Lys Gly Ser Asp Leu Met Thr  
 20 25 30  
 Leu Ala Leu Arg Gly Cys Cys Lys Asn Pro Tyr Cys Gly Ala Ser Lys  
 35 40 45  
 Thr Tyr Cys Gly Arg Arg Arg  
 50 55

<210> 273  
 <211> 139  
 <212> DNA  
 <213> Conus omaria

<220>  
 <221> CDS  
 <222> (40)..(108)

<400> 273  
 tctgatggca ggaatgccgc agcgtctgac ctgatggat ctg acc atc aag gga 54  
 Leu Thr Ile Lys Gly  
 1 5  
 tgc tgt tct tat cct ccc tgt ttc gcg act aat cca gac tgt ggt cga 102  
 Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Pro Asp Cys Gly Arg  
 10 15 20

cga cgc tgatgctcca ggaccctctg aaccacgacg t  
Arg Arg

139

<210> 274  
<211> 23  
<212> PRT  
<213> Conus omaria

<400> 274  
Leu Thr Ile Lys Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn  
1 5 10 15

Pro Asp Cys Gly Arg Arg Arg  
20

<210> 275  
<211> 126  
<212> DNA  
<213> Conus radiatus

<220>  
<221> CDS  
<222> (1)..(123)

<400> 275  
ttt gat ggc agg aat gcc gca gcc gac tac aaa ggg tct gaa ttg ctc 48  
Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu  
1 5 10 15

gct atg acc gtc agg gga gga tgc tgt tcc tat cct ccc tgt atc gca 96  
Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala  
20 25 30

aat aat cct ctt tgt gct gga aga cgc tga 126  
Asn Asn Pro Leu Cys Ala Gly Arg Arg  
35 40

<210> 276  
<211> 41  
<212> PRT  
<213> Conus radiatus

<400> 276  
Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu  
1 5 10 15

Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala  
20 25 30

Asn Asn Pro Leu Cys Ala Gly Arg Arg  
35 40

<210> 277  
<211> 126  
<212> DNA  
<213> Conus radiatus

<220>  
<221> CDS  
<222> (1)..(123)

<400> 277  
 ttt gat ggc agg aat gcc gca gcc gac tac aaa ggg tct gaa ttg ctc 48  
 Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu  
 1 5 10 15  
 gct atg acc gtc agg gga gga tgc tgt tcc tat cct ccc tgt atc gca 96  
 Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala  
 20 25 30  
 aat aat cct ttt tgt gct gga aga cgc tga 126  
 Asn Asn Pro Phe Cys Ala Gly Arg Arg  
 35 40

<210> 278  
 <211> 41  
 <212> PRT  
 <213> Conus radiatus

<400> 278  
 Phe Asp Gly Arg Asn Ala Ala Ala Asp Tyr Lys Gly Ser Glu Leu Leu  
 1 5 10 15  
 Ala Met Thr Val Arg Gly Gly Cys Cys Ser Tyr Pro Pro Cys Ile Ala  
 20 25 30  
 Asn Asn Pro Phe Cys Ala Gly Arg Arg  
 35 40

<210> 279  
 <211> 155  
 <212> DNA  
 <213> Conus virgo

<220>  
 <221> CDS  
 <222> (1)..(114)

<400> 279  
 tct tat gac agg tat gcc tcg ccc gtc gac aga gcg tct gcc ctg atc 48  
 Ser Tyr Asp Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile  
 1 5 10 15  
 gct cag gcc atc ctt cga gat tgc tgt tcc aat cct ccc tgt tcc caa 96  
 Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ser Gln  
 20 25 30  
 aat aat cca gac tgt atg taaagacgct gcttgctcca ggaccctctg 144  
 Asn Asn Pro Asp Cys Met  
 35  
 aaccacgacg t 155

<210> 280  
 <211> 38  
 <212> PRT  
 <213> Conus virgo

<400> 280  
 Ser Tyr Asp Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile  
 1 5 10 15



Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ser Gln  
                   20                  25                  30

Asn Asn Pro Asp Cys Met  
           35

<210> 281  
 <211> 155  
 <212> DNA  
 <213> Conus virgo

<220>  
 <221> CDS  
 <222> (1)..(114)

<400> 281  
 tct tat ggc agg tat gcc tca ccc gtc gac aga gcg tct gcc ctg atc 48  
 Ser Tyr Gly Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile  
   1                  5                  10                  15  
 gct cag gcc atc ctt cga gat tgc tgc tcc aat cct cct tgt gcc cat 96  
 Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ala His  
                   20                  25                  30  
 aat aat cca gac tgt cgt taaagacgct gcttgctcca ggaccctctg 144  
 Asn Asn Pro Asp Cys Arg  
           35  
 aaccacgacg t 155

<210> 282  
 <211> 38  
 <212> PRT  
 <213> Conus virgo

<400> 282  
 Ser Tyr Gly Arg Tyr Ala Ser Pro Val Asp Arg Ala Ser Ala Leu Ile  
   1                  5                  10                  15  
 Ala Gln Ala Ile Leu Arg Asp Cys Cys Ser Asn Pro Pro Cys Ala His  
                   20                  25                  30  
 Asn Asn Pro Asp Cys Arg  
           35

<210> 283  
 <211> 126  
 <212> DNA  
 <213> Conus achatinus

<220>  
 <221> CDS  
 <222> (1)..(123)

<400> 283  
 tct gat ggc agg aat gcc gca gcc aac gac aaa gcg tct ggc atg agc 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Gly Met Ser  
   1                  5                  10                  15  
 gcg ctg gcc gtc aat gaa tgc tgt acc aac cct gtc tgt cac gcg gaa 96  
 Ala Leu Ala Val Asn Glu Cys Cys Thr Asn Pro Val Cys His Ala Glu

<211> 126

<212> DNA  
 <213> *Conus achatinus*

<220>  
 <221> CDS  
 <222> (1)..(123)

<400> 287  
 tct gat ggc agg aat gcc gca gcc aac gac aaa gcg tct ggc atg agc 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Gly Met Ser  
 1 5 10 15  
 gcg ctg gcc gtc aat gaa tgc tgt acc aac cct gtc tgt cac gtg gaa 96  
 Ala Leu Ala Val Asn Glu Cys Cys Thr Asn Pro Val Cys His Val Glu  
 20 25 30  
 cat caa gaa ctt tgt gct aga aga cgc tga 126  
 His Gln Glu Leu Cys Ala Arg Arg Arg  
 35 40

<210> 288  
 <211> 41  
 <212> PRT  
 <213> *Conus achatinus*

<400> 288  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Gly Met Ser  
 1 5 10 15  
 Ala Leu Ala Val Asn Glu Cys Cys Thr Asn Pro Val Cys His Val Glu  
 20 25 30  
 His Gln Glu Leu Cys Ala Arg Arg Arg  
 35 40

<210> 289  
 <211> 220  
 <212> DNA  
 <213> *Conus ammiralis*

<220>  
 <221> CDS  
 <222> (1)..(180)

<400> 289  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ttc act tca gat cgt gca ttt cgt ggc agg aat gcc gca gcc aaa gcg 96  
 Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Ala  
 20 25 30  
 tct ggc ctg gtc ggt ctg acc gac aag agg caa gaa tgc tgt tct tat 144  
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Glu Cys Cys Ser Tyr  
 35 40 45  
 cct gcc tgt aac cta gat cat cca gaa ctt tgt ggt tgaagacgct 190  
 Pro Ala Cys Asn Leu Asp His Pro Glu Leu Cys Gly  
 50 55 60  
 gatgctccag gaccctctga accacgacgt 220

<210> 290  
 <211> 60  
 <212> PRT  
 <213> Conus ammiralis

<400> 290  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 Phe Thr Ser Asp Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys Ala  
             20                    25                    30  
 Ser Gly Leu Val Gly Leu Thr Asp Lys Arg Gln Glu Cys Cys Ser Tyr  
             35                    40                    45  
 Pro Ala Cys Asn Leu Asp His Pro Glu Leu Cys Gly  
       50                    55                    60

<210> 291  
 <211> 223  
 <212> DNA  
 <213> Conus ammiralis

<220>  
 <221> CDS  
 <222> (1)..(192)

<400> 291  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc act gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 tcc act tca ggt cgt cgt gca ttt cgt ggc agg aat gcc gca gcc aaa 96  
 Ser Thr Ser Gly Arg Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys  
             20                    25                    30  
 gcg tct gga ctg gtc ggt ctg act gac agg aga cca gaa tgc tgt agt 144  
 Ala Ser Gly Leu Val Gly Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser  
             35                    40                    45  
 gat cct cgc tgt aac tcg act cat cca gaa ctt tgt ggt gga aga cgc 192  
 Asp Pro Arg Cys Asn Ser Thr His Pro Glu Leu Cys Gly Gly Arg Arg  
       50                    55                    60  
 tgatgctcca ggaccctctg aaccacgacg t 223

<210> 292  
 <211> 64  
 <212> PRT  
 <213> Conus ammiralis

<400> 292  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
     1                    5                    10                    15  
 Ser Thr Ser Gly Arg Arg Ala Phe Arg Gly Arg Asn Ala Ala Ala Lys  
             20                    25                    30  
 Ala Ser Gly Leu Val Gly Leu Thr Asp Arg Arg Pro Glu Cys Cys Ser  
       35                    40                    45

Asp Pro Arg Cys Asn Ser Thr His Pro Glu Leu Cys Gly Gly Arg Arg  
 50 55 60

<210> 293  
 <211> 151  
 <212> DNA  
 <213> Conus arenatus

<220>  
 <221> CDS  
 <222> (1)..(120)

<400> 293  
 tct gat ggc agg aat gcc gca gcc aac gcg ttt gac ctg atc gat ctg 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Phe Asp Leu Ile Asp Leu  
 1 5 10 15  
 acc gcc agg cta aat tgc tgt atg att ccc ccc tgt tgg aag aaa tat 96  
 Thr Ala Arg Leu Asn Cys Cys Met Ile Pro Pro Cys Trp Lys Lys Tyr  
 20 25 30  
 gga gac aga tgt agt gaa gta cgc tgatgctcca ggaccctctg aaccacgacg 150  
 Gly Asp Arg Cys Ser Glu Val Arg  
 35 40  
 t 151

<210> 294  
 <211> 40  
 <212> PRT  
 <213> Conus arenatus

<400> 294  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Phe Asp Leu Ile Asp Leu  
 1 5 10 15  
 Thr Ala Arg Leu Asn Cys Cys Met Ile Pro Pro Cys Trp Lys Lys Tyr  
 20 25 30  
 Gly Asp Arg Cys Ser Glu Val Arg  
 35 40

<210> 295  
 <211> 126  
 <212> DNA  
 <213> Conus arenatus

<220>  
 <221> CDS  
 <222> (1)..(93)

<400> 295  
 tct gat ggc agg aat gcc gca cgc aaa gcg ttt ggc tgc tgc gac tta 48  
 Ser Asp Gly Arg Asn Ala Ala Arg Lys Ala Phe Gly Cys Cys Asp Leu  
 1 5 10 15  
 ata ccc tgt ttg gag aga tat ggt aac aga tgt aat gaa gtg cac 93  
 Ile Pro Cys Leu Glu Arg Tyr Gly Asn Arg Cys Asn Glu Val His  
 20 25 30  
 tgatgctcca ggaccctctg aaccacgcga cgt 126

<210> 296  
 <211> 31  
 <212> PRT  
 <213> Conus arenatus

<400> 296  
 Ser Asp Gly Arg Asn Ala Ala Arg Lys Ala Phe Gly Cys Cys Asp Leu  
           1                  5                  10                  15  
 Ile Pro Cys Leu Glu Arg Tyr Gly Asn Arg Cys Asn Glu Val His  
                   20                  25                  30

<210> 297  
 <211> 151  
 <212> DNA  
 <213> Conus arenatus

<220>  
 <221> CDS  
 <222> (1)..(120)

<400> 297  
 tct gat ggc agc aat gcc gca gcc aac gag ttt gac ctg atc gct ctg 48  
 Ser Asp Gly Ser Asn Ala Ala Ala Asn Glu Phe Asp Leu Ile Ala Leu  
           1                  5                  10                  15  
 acc gcc agg cta ggt tgc tgt aac gtt aca ccc tgt tgg gag aaa tat 96  
 Thr Ala Arg Leu Gly Cys Cys Asn Val Thr Pro Cys Trp Glu Lys Tyr  
                   20                  25                  30  
 gga gac aaa tgt aat gaa gta cgc tgatgcttca ggaccctctg aaccacgacg 150  
 Gly Asp Lys Cys Asn Glu Val Arg  
                   35                  40  
 t 151

<210> 298  
 <211> 40  
 <212> PRT  
 <213> Conus arenatus

<400> 298  
 Ser Asp Gly Ser Asn Ala Ala Ala Asn Glu Phe Asp Leu Ile Ala Leu  
           1                  5                  10                  15  
 Thr Ala Arg Leu Gly Cys Cys Asn Val Thr Pro Cys Trp Glu Lys Tyr  
                   20                  25                  30  
 Gly Asp Lys Cys Asn Glu Val Arg  
           35                  40

<210> 299  
 <211> 148  
 <212> DNA  
 <213> Conus arenatus

<220>  
 <221> CDS  
 <222> (1)..(117)

&lt;400&gt; 299

tct gat ggc agg aat gtc gca gca aaa gcg ttt cac cgg atc ggc cgg 48  
 Ser Asp Gly Arg Asn Val Ala Ala Lys Ala Phe His Arg Ile Gly Arg  
 1 5 10 15

acc atc agg gat gaa tgc tgt tcc aat cct gcc tgt agg gtg aat aat 96  
 Thr Ile Arg Asp Glu Cys Cys Ser Asn Pro Ala Cys Arg Val Asn Asn  
 20 25 30

cca cac gtt tgt aga cga cgc tgatgctcca ggaccctctg aaccacgacg t 148  
 Pro His Val Cys Arg Arg Arg  
 35

&lt;210&gt; 300

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Conus arenatus

&lt;400&gt; 300

Ser Asp Gly Arg Asn Val Ala Ala Lys Ala Phe His Arg Ile Gly Arg  
 1 5 10 15

Thr Ile Arg Asp Glu Cys Cys Ser Asn Pro Ala Cys Arg Val Asn Asn  
 20 25 30

Pro His Val Cys Arg Arg Arg  
 35

&lt;210&gt; 301

&lt;211&gt; 151

&lt;212&gt; DNA

&lt;213&gt; Conus arenatus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(120)

&lt;400&gt; 301

tct gat ggc agg aat gcc gca gcc aac gcg ttt gac ctg atg cct ctg 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Phe Asp Leu Met Pro Leu  
 1 5 10 15

acc gcc agg cta aat tgc tgt agc att ccc gcc tgt tgg aac gaa tat 96  
 Thr Ala Arg Leu Asn Cys Cys Ser Ile Pro Gly Cys Trp Asn Glu Tyr  
 20 25 30

aaa gac aga tgt agt aaa gta cgc tgatgctcca ggaccctctg aaccacgacg 150  
 Lys Asp Arg Cys Ser Lys Val Arg  
 35 40

t 151

&lt;210&gt; 302

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Conus arenatus

&lt;400&gt; 302

Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Phe Asp Leu Met Pro Leu  
 1 5 10 15

Thr Ala Arg Leu Asn Cys Cys Ser Ile Pro Gly Cys Trp Asn Glu Tyr  
                   20                                  25                                  30

Lys Asp Arg Cys Ser Lys Val Arg  
                   35                                  40

<210> 303  
 <211> 157  
 <212> DNA  
 <213> Conus aurisiacus

<220>  
 <221> CDS  
 <222> (52)..(126)

<400> 303  
 tctgatggca ggaatgccgc agccgacgac aaagcgtctg acctggctgc t ctg gtc 57  
   Leu Val  
   1

gtc agg gga gga tgc tgt tcc cac cct gtc tgt tac ttt aat aat cca 105  
 Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Tyr Phe Asn Asn Pro  
                   5                                  10                                  15

caa atg tgt cgt gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 157  
 Gln Met Cys Arg Gly Arg Arg  
           20                                  25

<210> 304  
 <211> 25  
 <212> PRT  
 <213> Conus aurisiacus

<400> 304  
 Leu Val Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Tyr Phe Asn  
   1                                  5                                  10                                  15

Asn Pro Gln Met Cys Arg Gly Arg Arg  
                   20                                  25

<210> 305  
 <211> 157  
 <212> DNA  
 <213> Conus aurisiacus

<220>  
 <221> CDS  
 <222> (52)..(126)

<400> 305  
 tctgatggca ggaatgccgc agccgacgac aaagcgtctg acctggctgc t ctg gcc 57  
   Leu Ala  
   1

gtc agg gga gga tgc tgt tcc cac cct gtc tgt aac ttg aat aat cca 105  
 Val Arg Gly Gly Cys Cys Ser His Pro Val Cys Asn Leu Asn Asn Pro  
                   5                                  10                                  15

caa atg tgt cgt gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 157  
 Gln Met Cys Arg Gly Arg Arg  
   20                                  25



```
<220>
<221> CDS
<222> (1) .. (120)
```

[illegible]

<400> 309  
 tct gat ggc ggg aat gcc gca gcc aaa gcg tct gac ctg atc gct cag 48  
 Ser Asp Gly Gly Asn Ala Ala Ala Lys Ala Ser Asp Leu Ile Ala Gln  
 1 5 10 15  
 acc atc agg gga gga tgc tgt tcc tat cct gcc tgt agc gtg gaa cat 96  
 Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Ala Cys Ser Val Glu His  
 20 25 30  
 caa gac ctt tgt gat gga aga cgc tgatgctcca ggaccctctg aaccacgacg 150  
 Gln Asp Leu Cys Asp Gly Arg Arg  
 35 40  
 t 151

<210> 310  
 <211> 40  
 <212> PRT  
 <213> Conus betulinus

<400> 310  
 Ser Asp Gly Gly Asn Ala Ala Ala Lys Ala Ser Asp Leu Ile Ala Gln  
 1 5 10 15  
 Thr Ile Arg Gly Gly Cys Cys Ser Tyr Pro Ala Cys Ser Val Glu His  
 20 25 30  
 Gln Asp Leu Cys Asp Gly Arg Arg  
 35 40

<210> 311  
 <211> 114  
 <212> DNA  
 <213> Conus characteristicus

<220>  
 <221> CDS  
 <222> (1)..(111)

<400> 311  
 tct tat ggc agg aat gcc gca gcc aaa gcg ttt gaa gtg agt tgc tgt 48  
 Ser Tyr Gly Arg Asn Ala Ala Ala Lys Ala Phe Glu Val Ser Cys Cys  
 1 5 10 15  
 gtc gtt cgc ccc tgt tgg att cgc tat caa gag gaa tgt ctt gaa gca 96  
 Val Val Arg Pro Cys Trp Ile Arg Tyr Gln Glu Glu Cys Leu Glu Ala  
 20 25 30  
 gat ccc agg acc ctc tga 114  
 Asp Pro Arg Thr Leu  
 35

<210> 312  
 <211> 37  
 <212> PRT  
 <213> Conus characteristicus

<400> 312  
 Ser Tyr Gly Arg Asn Ala Ala Ala Lys Ala Phe Glu Val Ser Cys Cys  
 1 5 10 15

Val Val Arg Pro Cys Trp Ile Arg Tyr Gln Glu Glu Cys Leu Glu Ala  
                   20                  25                  30

Asp Pro Arg Thr Leu  
                   35

<210> 313  
 <211> 123  
 <212> DNA  
 <213> Conus characteristicus

<220>  
 <221> CDS  
 <222> (1)..(120)

<400> 313  
 tct gat ggc agg aat gcc gca gcc aac gcc ctt gac ctg atc act ctg 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Leu Asp Leu Ile Thr Leu  
   1                  5                  10                  15  
 atc gcc agg caa aat tgc tgt agc att ccc ggc tgt tgg gag aaa tat 96  
 Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro Gly Cys Trp Glu Lys Tyr  
                   20                  25                  30  
 gga gac aaa tgt agt gaa gta cgc tga 123  
 Gly Asp Lys Cys Ser Glu Val Arg  
                   35                  40

<210> 314  
 <211> 40  
 <212> PRT  
 <213> Conus characteristicus

<400> 314  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Ala Leu Asp Leu Ile Thr Leu  
   1                  5                  10                  15  
 Ile Ala Arg Gln Asn Cys Cys Ser Ile Pro Gly Cys Trp Glu Lys Tyr  
                   20                  25                  30  
 Gly Asp Lys Cys Ser Glu Val Arg  
                   35                  40

<210> 315  
 <211> 154  
 <212> DNA  
 <213> Conus catus

<220>  
 <221> CDS  
 <222> (1)..(123)

<400> 315  
 tct gat ggc agg aat gaa gca gcc aac gac gaa gcg tct gac gtg atc 48  
 Ser Asp Gly Arg Asn Glu Ala Ala Asn Asp Glu Ala Ser Asp Val Ile  
   1                  5                  10                  15  
 gag ctg gcc ctc aag gga tgc tgt tcc aac cct gtc tgt cac ttg gag 96  
 Glu Leu Ala Leu Lys Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu  
                   20                  25                  30

cat cca aac gct tgt ggt aga aga cgc tgatgctcca ggaccctctg 143  
 His Pro Asn Ala Cys Gly Arg Arg Arg  
           35                          40

aaccacgacg t 154

<210> 316  
 <211> 41  
 <212> PRT  
 <213> Conus catus

<400> 316  
 Ser Asp Gly Arg Asn Glu Ala Ala Asn Asp Glu Ala Ser Asp Val Ile  
   1                          5                          10                          15  
 Glu Leu Ala Leu Lys Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu  
                           20                          25                          30  
 His Pro Asn Ala Cys Gly Arg Arg Arg  
           35                          40

<210> 317  
 <211> 154  
 <212> DNA  
 <213> Conus catus

<220>  
 <221> CDS  
 <222> (1)..(123)

<400> 317  
 tct gat ggc agg aat gcc gca gcc aac gac aaa gcg tct gac ctg gtc 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Val  
   1                          5                          10                          15  
 gct ctg gcc gtc agg gga tgc tgt tcc aac cct atc tgt tac ttt aat 96  
 Ala Leu Ala Val Arg Gly Cys Cys Ser Asn Pro Ile Cys Tyr Phe Asn  
                           20                          25                          30  
 aat cca cga att tgt cgt gga aga cgc tgatgctcca ggaccctctg 143  
 Asn Pro Arg Ile Cys Arg Gly Arg Arg  
           35                          40

aaccacgacg t 154

<210> 318  
 <211> 41  
 <212> PRT  
 <213> Conus catus

<400> 318  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Val  
   1                          5                          10                          15  
 Ala Leu Ala Val Arg Gly Cys Cys Ser Asn Pro Ile Cys Tyr Phe Asn  
                           20                          25                          30  
 Asn Pro Arg Ile Cys Arg Gly Arg Arg  
           35                          40

<210> 319  
 <211> 111  
 <212> DNA  
 <213> Conus episcopatus

<220>  
 <221> CDS  
 <222> (1)..(108)

<400> 319  
 tct cat ggc agg aat gcc gca cgc aaa gcg tct gac ctg atc gct ctg 48  
 Ser His Gly Arg Asn Ala Ala Arg Lys Ala Ser Asp Leu Ile Ala Leu  
 1 5 10 15  
 acc gtc agg gaa tgc tgt tct cag cct ccc tgt cgc tgg aaa cat cca 96  
 Thr Val Arg Glu Cys Cys Ser Gln Pro Pro Cys Arg Trp Lys His Pro  
 20 25 30  
 gaa ctt tgt agt tga 111  
 Glu Leu Cys Ser  
 35

<210> 320  
 <211> 36  
 <212> PRT  
 <213> Conus episcopatus

<400> 320  
 Ser His Gly Arg Asn Ala Ala Arg Lys Ala Ser Asp Leu Ile Ala Leu  
 1 5 10 15  
 Thr Val Arg Glu Cys Cys Ser Gln Pro Pro Cys Arg Trp Lys His Pro  
 20 25 30  
 Glu Leu Cys Ser  
 35

<210> 321  
 <211> 151  
 <212> DNA  
 <213> Conus geographus

<220>  
 <221> CDS  
 <222> (1)..(120)

<400> 321  
 tct gat ggc agg aat gac gca gcc aaa gcg ttt gac ctg ata tct tcg 48  
 Ser Asp Gly Arg Asn Asp Ala Ala Lys Ala Phe Asp Leu Ile Ser Ser  
 1 5 10 15  
 acc gtc aag aaa gga tgc tgt tcc cat cct gcc tgt gcg ggg aat aat 96  
 Thr Val Lys Lys Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn  
 20 25 30  
 caa cat att tgt ggc cga aga cgc tgatgctcca ggaccctctg aaccacgacg 150  
 Gln His Ile Cys Gly Arg Arg  
 35 40

t 151

<210> 322  
 <211> 40  
 <212> PRT  
 <213> Conus geographus

<400> 322  
 Ser Asp Gly Arg Asn Asp Ala Ala Lys Ala Phe Asp Leu Ile Ser Ser  
           1                  5                  10                  15  
 Thr Val Lys Lys Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn  
                   20                  25                  30  
 Gln His Ile Cys Gly Arg Arg Arg  
           35                  40

<210> 323  
 <211> 154  
 <212> DNA  
 <213> Conus geographus

<220>  
 <221> CDS  
 <222> (1)..(123)  
 <400> 323  
 tct gat ggc agg aat gcc gca gcc aac gac caa gcg tct gac ctg atg 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Gln Ala Ser Asp Leu Met  
           1                  5                  10                  15  
 gct gcg acc gtc agg gga tgc tgt gcc gtt cct tcc tgt cgc ctc cgt 96  
 Ala Ala Thr Val Arg Gly Cys Cys Ala Val Pro Ser Cys Arg Leu Arg  
                   20                  25                  30  
 aat cca gac ctt tgt ggt gga gga cgc tgatgctcca ggaccctctg 143  
 Asn Pro Asp Leu Cys Gly Gly Gly Arg  
           35                  40  
 aaccacgacg t 154

<210> 324  
 <211> 41  
 <212> PRT  
 <213> Conus geographus

<400> 324  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Gln Ala Ser Asp Leu Met  
           1                  5                  10                  15  
 Ala Ala Thr Val Arg Gly Cys Cys Ala Val Pro Ser Cys Arg Leu Arg  
                   20                  25                  30  
 Asn Pro Asp Leu Cys Gly Gly Gly Arg  
           35                  40

<210> 325  
 <211> 120  
 <212> DNA  
 <213> Conus imperialis

<220>  
 <221> CDS

&lt;222&gt; (1)..(117)

&lt;400&gt; 325

```

ctt gat gaa agg aat gcc gca gcc gac gac aaa gcg tct gac ctg atc 48
Leu Asp Glu Arg Asn Ala Ala Ala Asp Asp Lys Ala Ser Asp Leu Ile
  1              5              10              15

```

```

gct caa atc gtc agg aga gga tgc tgt tcc cat cct gcc tgt aac gtg 96
Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val
              20              25              30

```

```

aat aat cca cac att tgt ggt tga 120
Asn Asn Pro His Ile Cys Gly
      35

```

&lt;210&gt; 326

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Conus imperialis

&lt;400&gt; 326

```

Leu Asp Glu Arg Asn Ala Ala Ala Asp Asp Lys Ala Ser Asp Leu Ile
  1              5              10              15

```

```

Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val
              20              25              30

```

```

Asn Asn Pro His Ile Cys Gly
      35

```

&lt;210&gt; 327

&lt;211&gt; 142

&lt;212&gt; DNA

&lt;213&gt; Conus lividus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(111)

&lt;400&gt; 327

```

tct gat ggc agg aat act gca gcc aaa gtc aaa tat tct aag acg ccg 48
Ser Asp Gly Arg Asn Thr Ala Ala Lys Val Lys Tyr Ser Lys Thr Pro
  1              5              10              15

```

```

gag gaa tgc tgt ccc aat cct ccc tgt ttc gcg aca aat tcg gat att 96
Glu Glu Cys Cys Pro Asn Pro Pro Cys Phe Ala Thr Asn Ser Asp Ile
              20              25              30

```

```

tgt ggc gga aga cgc tgatgctcca ggaccctctg aaccacgacg t 142
Cys Gly Gly Arg Arg
      35

```

&lt;210&gt; 328

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Conus lividus

&lt;400&gt; 328

```

Ser Asp Gly Arg Asn Thr Ala Ala Lys Val Lys Tyr Ser Lys Thr Pro
  1              5              10              15

```

Glu Glu Cys Cys Pro Asn Pro Pro Cys Phe Ala Thr Asn Ser Asp Ile  
                   20                  25                  30

Cys Gly Gly Arg Arg  
           35

<210> 329  
 <211> 157  
 <212> DNA  
 <213> Conus lividus

<220>  
 <221> CDS  
 <222> (1)..(117)

<400> 329  
 tct aat ggc agg aat gcc gca gcc aaa ttc aaa gcg cct gcc ctg atg 48  
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met  
   1                  5                  10                  15  
 aag cgg acc gtc agg gat gct tgc tgt tca gac cct cgc tgt tcc ggg 96  
 Lys Arg Thr Val Arg Asp Ala Cys Cys Ser Asp Pro Arg Cys Ser Gly  
                   20                  25                  30  
 aaa cat caa gac ctg tgt ggc tgaagacgct gatgctccag gaccctctga 147  
 Lys His Gln Asp Leu Cys Gly  
           35  
 accacgacgt 157

<210> 330  
 <211> 39  
 <212> PRT  
 <213> Conus lividus

<400> 330  
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met  
   1                  5                  10                  15  
 Lys Arg Thr Val Arg Asp Ala Cys Cys Ser Asp Pro Arg Cys Ser Gly  
                   20                  25                  30  
 Lys His Gln Asp Leu Cys Gly  
           35

<210> 331  
 <211> 157  
 <212> DNA  
 <213> Conus lividus

<220>  
 <221> CDS  
 <222> (1)..(117)

<400> 331  
 tct aat ggc agg aat gcc gca gcc aaa ttc aaa gcg cct gcc ctg atg 48  
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met  
   1                  5                  10                  15  
 gag ctg acc gtc agg gaa gat tgc tgt tca gac cct cgc tgt tcc gtg 96  
 Glu Leu Thr Val Arg Glu Asp Cys Cys Ser Asp Pro Arg Cys Ser Val



20 25 30  
 gga cat caa gac ctg tgt ggc tgaagacgct gatgctccag gaccctctga 147  
 Gly His Gln Asp Leu Cys Gly  
 35  
 accacgacgt 157  
 <210> 332  
 <211> 39  
 <212> PRT  
 <213> Conus lividus  
 <400> 332  
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met  
 1 5 10 15  
 Glu Leu Thr Val Arg Glu Asp Cys Cys Ser Asp Pro Arg Cys Ser Val  
 20 25 30  
 Gly His Gln Asp Leu Cys Gly  
 35  
 <210> 333  
 <211> 157  
 <212> DNA  
 <213> Conus lividus  
 <220>  
 <221> CDS  
 <222> (1)..(126)  
 <400> 333  
 gca ttt gat ggc agg aat gct gca gcc agc gac aaa gcg tcc gag ctg 48  
 Ala Phe Asp Gly Arg Asn Ala Ala Ala Ser Asp Lys Ala Ser Glu Leu  
 1 5 10 15  
 atg gct ctg gcc gtc agg gga tgc tgt tcc cat cct gcc tgt gct ggg 96  
 Met Ala Leu Ala Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly  
 20 25 30  
 agt aat gca cat atc tgt ggc aga aga cgc tgatgctcca ggaccctctg 146  
 Ser Asn Ala His Ile Cys Gly Arg Arg Arg  
 35 40  
 aaccacgacg t 157  
 <210> 334  
 <211> 42  
 <212> PRT  
 <213> Conus lividus  
 <400> 334  
 Ala Phe Asp Gly Arg Asn Ala Ala Ala Ser Asp Lys Ala Ser Glu Leu  
 1 5 10 15  
 Met Ala Leu Ala Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly  
 20 25 30  
 Ser Asn Ala His Ile Cys Gly Arg Arg Arg  
 35 40

<210> 335  
 <211> 157  
 <212> DNA  
 <213> Conus lividus

<220>  
 <221> CDS  
 <222> (1)..(117)

<400> 335  
 tct aat ggc agg aat gcc gca gcc aaa ttc aaa gcg cct gcc ctg atg 48  
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met  
 1 5 10 15  
 aag ctg acc gtc agg gag gat tgc tgt tca gac cct cgc tgt tcc gtg 96  
 Lys Leu Thr Val Arg Glu Asp Cys Cys Ser Asp Pro Arg Cys Ser Val  
 20 25 30  
 gga cat caa gac atg tgt gcc tgaagacgct gatgctccag gaccctctga 147  
 Gly His Gln Asp Met Cys Gly  
 35  
 atcacgacgt 157

<210> 336  
 <211> 39  
 <212> PRT  
 <213> Conus lividus

<400> 336  
 Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met  
 1 5 10 15  
 Lys Leu Thr Val Arg Glu Asp Cys Cys Ser Asp Pro Arg Cys Ser Val  
 20 25 30  
 Gly His Gln Asp Met Cys Gly  
 35

<210> 337  
 <211> 154  
 <212> DNA  
 <213> Conus lividus

<220>  
 <221> CDS  
 <222> (1)..(114)

<400> 337  
 ttt gaa tgc agg aat gct gca ggc aac gac aaa gcg act gac ctg atg 48  
 Phe Glu Cys Arg Asn Ala Ala Gly Asn Asp Lys Ala Thr Asp Leu Met  
 1 5 10 15  
 gct ctg act gtc agg gga tgc tgt tcc cat cct gcc tgt gct ggg aat 96  
 Ala Leu Thr Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn  
 20 25 30  
 aat cca cat atc tgc ggc tgaagacgct gatgctccag gaccctctga 144  
 Asn Pro His Ile Cys Gly  
 35

accacgacgt

154

&lt;210&gt; 338

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Conus lividus

&lt;400&gt; 338

Phe Glu Cys Arg Asn Ala Ala Gly Asn Asp Lys Ala Thr Asp Leu Met  
 1 5 10 15

Ala Leu Thr Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn  
 20 25 30

Asn Pro His Ile Cys Gly  
 35

&lt;210&gt; 339

&lt;211&gt; 154

&lt;212&gt; DNA

&lt;213&gt; Conus lividus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(114)

&lt;400&gt; 339

ttt gat ggc agg aac gcc gca gcc aac aac aaa gcg act gat ctg atg 48  
 Phe Asp Gly Arg Asn Ala Ala Ala Asn Asn Lys Ala Thr Asp Leu Met  
 1 5 10 15

gct ctg act gtc aga gga tgc tgt ggc aat cct tca tgt agc atc cat 96  
 Ala Leu Thr Val Arg Gly Cys Cys Gly Asn Pro Ser Cys Ser Ile His  
 20 25 30

att cct tac gtt tgt aat tagagacact gatgctccag gaccctctga 144  
 Ile Pro Tyr Val Cys Asn  
 35

accacgacgt

154

&lt;210&gt; 340

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Conus lividus

&lt;400&gt; 340

Phe Asp Gly Arg Asn Ala Ala Ala Asn Asn Lys Ala Thr Asp Leu Met  
 1 5 10 15

Ala Leu Thr Val Arg Gly Cys Cys Gly Asn Pro Ser Cys Ser Ile His  
 20 25 30

Ile Pro Tyr Val Cys Asn  
 35

&lt;210&gt; 341

&lt;211&gt; 157

&lt;212&gt; DNA

&lt;213&gt; Conus lividus

[illegible]

```

<400> 342
Ser Asn Gly Arg Asn Ala Ala Ala Lys Phe Lys Ala Pro Ala Leu Met
 1          5          10          15
Lys Arg Thr Asp Ser Glu Glu Cys Cys Leu Asp Ser Arg Cys Ala Gly
          20          25          30
Gln His Gln Asp Leu Cys Gly Gly Arg Arg
      35          40

```

```
<220>
<221> CDS
<222> (1)..(123)
```

|           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 343 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| tct       | gat | ggc | agg | aat | gcc | gca | gcc | aag | gac | aaa | gcg | tct | gac | ctg | gtc | 48  |
| Ser       | Asp | Gly | Arg | Asn | Ala | Ala | Ala | Lys | Asp | Lys | Ala | Ser | Asp | Leu | Val |     |
| 1         |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
|           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| gct       | ctg | acc | gtc | aag | gga | tgc | tgt | tct | aat | cct | ccc | tgt | tac | gcg | aat | 96  |
| Ala       | Leu | Thr | Val | Lys | Gly | Cys | Cys | Ser | Asn | Pro | Pro | Cys | Tyr | Ala | Asn |     |
|           |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
|           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| aat       | caa | gcc | tat | tgt | aat | gga | aga | cgc | tga |     |     |     |     |     |     | 126 |
| Asn       | Gln | Ala | Tyr | Cys | Asn | Gly | Arg | Arg |     |     |     |     |     |     |     |     |
|           |     | 35  |     |     |     | 40  |     |     |     |     |     |     |     |     |     |     |

```
<210> 344
<211> 41
<212> PRT
<213> Conus marmoreus
```

&lt;400&gt; 344

Ser Asp Gly Arg Asn Ala Ala Ala Lys Asp Lys Ala Ser Asp Leu Val  
 1 5 10 15

Ala Leu Thr Val Lys Gly Cys Cys Ser Asn Pro Pro Cys Tyr Ala Asn  
 20 25 30

Asn Gln Ala Tyr Cys Asn Gly Arg Arg  
 35 40

&lt;210&gt; 345

&lt;211&gt; 117

&lt;212&gt; DNA

&lt;213&gt; Conus marmoreus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(114)

&lt;400&gt; 345

tct gat ggc agg aat gcc gca gcc aag gac aaa gcg tct gac ctg gtc 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Lys Asp Lys Ala Ser Asp Leu Val  
 1 5 10 15

gct ctg acc gtc aag gga tgc tgt tct cat cct gcc tgt agc gtg aat 96  
 Ala Leu Thr Val Lys Gly Cys Cys Ser His Pro Ala Cys Ser Val Asn  
 20 25 30

aat cca gac att tgt ggt tga 117  
 Asn Pro Asp Ile Cys Gly  
 35

&lt;210&gt; 346

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Conus marmoreus

&lt;400&gt; 346

Ser Asp Gly Arg Asn Ala Ala Ala Lys Asp Lys Ala Ser Asp Leu Val  
 1 5 10 15

Ala Leu Thr Val Lys Gly Cys Cys Ser His Pro Ala Cys Ser Val Asn  
 20 25 30

Asn Pro Asp Ile Cys Gly  
 35

&lt;210&gt; 347

&lt;211&gt; 145

&lt;212&gt; DNA

&lt;213&gt; Conus musicus

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(114)

&lt;400&gt; 347

tct gat ggc agg aat gct gca gcc aac aac aaa gtg gct ttg acc atg 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asn Lys Val Ala Leu Thr Met  
 1 5 10 15

agg gga aaa tgc tgt atc aat gat gcg tgt cgc tcg aaa cat cca cag 96  
 Arg Gly Lys Cys Cys Ile Asn Asp Ala Cys Arg Ser Lys His Pro Gln  
                   20                  25                  30

tac tgt tct gga aga cgc tgatactcca ggaccctctg aaccacgacg t 145  
 Tyr Cys Ser Gly Arg Arg  
                   35

<210> 348  
 <211> 38  
 <212> PRT  
 <213> Conus musicus

<400> 348  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asn Lys Val Ala Leu Thr Met  
   1                  5                  10                  15

Arg Gly Lys Cys Cys Ile Asn Asp Ala Cys Arg Ser Lys His Pro Gln  
                   20                  25                  30

Tyr Cys Ser Gly Arg Arg  
                   35

<210> 349  
 <211> 154  
 <212> DNA  
 <213> Conus musicus

<220>  
 <221> CDS  
 <222> (1)..(123)

<400> 349  
 tct gat ggc agg aat gct gca gcc aac gac aaa gtg tct gac cag atg 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Val Ser Asp Gln Met  
   1                  5                  10                  15

gct ctg gtt gtc agg gga tgc tgt tac aat att gcc tgt aga att aat 96  
 Ala Leu Val Val Arg Gly Cys Cys Tyr Asn Ile Ala Cys Arg Ile Asn  
                   20                  25                  30

aat cca cgg tac tgt cgt gga aaa cgc tgatgttcca ggaccctctg 143  
 Asn Pro Arg Tyr Cys Arg Gly Lys Arg  
                   35                  40

aaccacgacg t 154

<210> 350  
 <211> 41  
 <212> PRT  
 <213> Conus musicus

<400> 350  
 Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Val Ser Asp Gln Met  
   1                  5                  10                  15

Ala Leu Val Val Arg Gly Cys Cys Tyr Asn Ile Ala Cys Arg Ile Asn  
                   20                  25                  30

Asn Pro Arg Tyr Cys Arg Gly Lys Arg  
                   35                  40

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<210> 354
<211> 22
<212> PRT
<213> Conus obscurus
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<400> 354  
 Leu Ala Leu Arg Asp Glu Cys Cys Ala Ser Pro Pro Cys Arg Leu Asn  
 1 5 10 15

Asn Pro Tyr Val Cys His  
 20

<210> 355  
 <211> 217  
 <212> DNA  
 <213> Conus obscurus

<220>  
 <221> CDS  
 <222> (1)..(186)

<400> 355  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 ccc act tca gat cgt gca tct gat agg agg aat gcc gca gcc aaa gcg 96  
 Pro Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Ala Lys Ala  
 20 25 30  
 ttt gac ctg aga tat tcg acc gcc aag aga gga tgc tgt tcc aat cct 144  
 Phe Asp Leu Arg Tyr Ser Thr Ala Lys Arg Gly Cys Cys Ser Asn Pro  
 35 40 45  
 gtc tgt tgg cag aat aat gca gaa tac tgt cgt gaa agt ggc 186  
 Val Cys Trp Gln Asn Asn Ala Glu Tyr Cys Arg Glu Ser Gly  
 50 55 60  
 taatgctcca ggaccctctg aaccacgacg t 217

<210> 356  
 <211> 62  
 <212> PRT  
 <213> Conus obscurus

<400> 356  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15  
 Pro Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Ala Lys Ala  
 20 25 30  
 Phe Asp Leu Arg Tyr Ser Thr Ala Lys Arg Gly Cys Cys Ser Asn Pro  
 35 40 45  
 Val Cys Trp Gln Asn Asn Ala Glu Tyr Cys Arg Glu Ser Gly  
 50 55 60

<210> 357  
 <211> 208  
 <212> DNA  
 <213> Conus obscurus

<220>  
 <221> CDS  
 <222> (1)..(168)



<400> 357  
 atg ttc acc gtg ttt ctg ttg gtt gtc ttg gca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

ttc act tca gat cgt gca tct gat ggc ggg aat gtc gca gcg tct cac 96  
 Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Val Ala Ala Ser His  
 20 25 30

ctg atc gct ctg acc atc aag gga tgc tgt tct cac cct ccc tgt gcc 144  
 Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala  
 35 40 45

cag aat aat caa gac tat tgt ggt tgacgacgct gatgctccag gaccctctga 198  
 Gln Asn Asn Gln Asp Tyr Cys Gly  
 50 55

accacgacgt 208

<210> 358  
 <211> 56  
 <212> PRT  
 <213> Conus obscurus

<400> 358  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ala Thr Thr Val Val Ser  
 1 5 10 15

Phe Thr Ser Asp Arg Ala Ser Asp Gly Gly Asn Val Ala Ala Ser His  
 20 25 30

Leu Ile Ala Leu Thr Ile Lys Gly Cys Cys Ser His Pro Pro Cys Ala  
 35 40 45

Gln Asn Asn Gln Asp Tyr Cys Gly  
 50 55

<210> 359  
 <211> 217  
 <212> DNA  
 <213> Conus obscurus

<220>  
 <221> CDS  
 <222> (1)..(186)

<400> 359  
 atg ttc acc gtg ttt ctg ttg gtt gtc tta tca acc acc gtc gtt tcc 48  
 Met Phe Thr Val Phe Leu Leu Val Val Leu Ser Thr Thr Val Val Ser  
 1 5 10 15

tcc act tca gat cgt gca tct gat agg agg aat ggc gca gcc aaa gcg 96  
 Ser Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Ala Lys Ala  
 20 25 30

tct gac ctg atg tat tcg acc gtc aag aaa gga tgt tgt tcc cat cct 144  
 Ser Asp Leu Met Tyr Ser Thr Val Lys Lys Gly Cys Cys Ser His Pro  
 35 40 45

gcc tgt tcg ggg aat aat cga gaa tat tgt cgt gaa agt gcc 186  
 Ala Cys Ser Gly Asn Asn Arg Glu Tyr Cys Arg Glu Ser Gly  
 50 55 60

217

```

<400> 360
Met Phe Thr Val Phe Leu Leu Val Val Leu Ser Thr Thr Val Val Ser
  1           5           10           15
Ser Thr Ser Asp Arg Ala Ser Asp Arg Arg Asn Ala Ala Ala Lys Ala
 20           25           30
Ser Asp Leu Met Tyr Ser Thr Val Lys Lys Gly Cys Cys Ser His Pro
 35           40           45
Ala Cys Ser Gly Asn Asn Arg Glu Tyr Cys Arg Glu Ser Gly
 50           55           60

```

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<220>
<221> CDS
<222> (52) .. (126)
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<400> 361
ttt gat ggc a gga atg cct c agc cga cag c aaagt ggctg ccc gga tgc t cag atc 57
                                     Gln Ile
                                     1

gac agg gat cca tgc tgt tcc tat cct gac tgt ggc gcg aat cat cca 105
Asp Arg Asp Pro Cys Cys Ser Tyr Pro Asp Cys Gly Ala Asn His Pro
          5                                10                                15

gag att tgt ggt gga aaa cgc t gat gct cca gga cct ctg aacc acg acg t 157
Glu Ile Cys Gly Gly Lys Arg
    20                                25

```

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<210> 362
<211> 25
<212> PRT
<213> Conus omaria
```

<400> 362  
Gln Ile Asp Arg Asp Pro Cys Cys Ser Tyr Pro Asp Cys Gly Ala Asn  
1 5 10 15  
His Pro Glu Ile Cys Gly Gly Lys Arg  
20 25

```
<210> 363
<211> 128
<212> DNA
<213> Conus omaria
```

<220>

&lt;221&gt; CDS

&lt;222&gt; (26)..(88)

&lt;400&gt; 363

tctcatggca ggaatgccgc acgct ctg acc gtc agg gaa tgc tgt tct cag 52  
 Leu Thr Val Arg Glu Cys Cys Ser Gln  
                                   1                                  5

cct cct tgt cgc tgg aaa cat cca gaa ctt tgt agt tgaagacgct 98  
 Pro Pro Cys Arg Trp Lys His Pro Glu Leu Cys Ser  
   10                                  15                                  20

gatgctccag gaccctctga accacgacgt 128

&lt;210&gt; 364

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Conus omaria

&lt;400&gt; 364

Leu Thr Val Arg Glu Cys Cys Ser Gln Pro Pro Cys Arg Trp Lys His  
   1                                  5                                  10                                  15

Pro Glu Leu Cys Ser  
                                   20

&lt;210&gt; 365

&lt;211&gt; 154

&lt;212&gt; DNA

&lt;213&gt; Conus omaria

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (52)..(123)

&lt;400&gt; 365

ttt gatggca ggaatgctgc agccagcgc aaagcgtctg agctgatggc t ctg gcc 57  
   Leu Ala  
   1

gtc agg gga tgc tgt tcc cat cct gcc tgt gct ggg aat aat cca cat 105  
 Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn Pro His  
                                   5                                  10                                  15

atc tgt ggc aga aga cgc tga tgc tcca ggaccctctg aaccacgacg t 154  
 Ile Cys Gly Arg Arg Arg  
   20

&lt;210&gt; 366

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Conus omaria

&lt;400&gt; 366

Leu Ala Val Arg Gly Cys Cys Ser His Pro Ala Cys Ala Gly Asn Asn  
   1                                  5                                  10                                  15

Pro His Ile Cys Gly Arg Arg Arg  
                                   20

<400> 370  
Leu Thr Val Arg Glu Glu Cys Cys Ser Asp Pro Arg Cys Ser Val Gly

1 5 10 15

His Gln Asp Met Cys Arg  
20

<210> 371  
<211> 151  
<212> DNA  
<213> Conus purpurascens

<220>  
<221> CDS  
<222> (1)..(120)

<400> 371  
act gat ggc agg aat gct gca gcc ata gcg ctt gac ctg atc gct ccg 48  
Thr Asp Gly Arg Asn Ala Ala Ala Ile Ala Leu Asp Leu Ile Ala Pro  
1 5 10 15

gcc gtc agg gga gga tgc tgt tcc aat cct gcc tgt tta gtg aat cat 96  
Ala Val Arg Gly Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His  
20 25 30

cta gaa atg tgt ggt aaa aga cgc tga tgc ccca ggaccctctg aaccacgacg 150  
Leu Glu Met Cys Gly Lys Arg Arg  
35 40

t 151

<210> 372  
<211> 40  
<212> PRT  
<213> Conus purpurascens

<400> 372  
Thr Asp Gly Arg Asn Ala Ala Ala Ile Ala Leu Asp Leu Ile Ala Pro  
1 5 10 15

Ala Val Arg Gly Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His  
20 25 30

Leu Glu Met Cys Gly Lys Arg Arg  
35 40

<210> 373  
<211> 160  
<212> DNA  
<213> Conus purpurascens

<220>  
<221> CDS  
<222> (1)..(120)

<400> 373  
tct gat ggc agg gat gcc gca gcc aac gac aaa gcg tct gac ctg atc 48  
Ser Asp Gly Arg Asp Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Ile  
1 5 10 15

gct ctg acc gcc agg aga gat cca tgc tgt ttc aat cct gcc tgt aac 96  
Ala Leu Thr Ala Arg Arg Asp Pro Cys Cys Phe Asn Pro Ala Cys Asn  
20 25 30

gtg aat aat cca cag att tgt ggt tgaagacgct gatgctccag gaccctctga 150  
 Val Asn Asn Pro Gln Ile Cys Gly  
           35                  40

accacgacgt 160

<210> 374  
 <211> 40  
 <212> PRT  
 <213> Conus purpurascens

<400> 374  
 Ser Asp Gly Arg Asp Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Ile  
   1                  5                  10                  15  
 Ala Leu Thr Ala Arg Arg Asp Pro Cys Cys Phe Asn Pro Ala Cys Asn  
           20                  25                  30  
 Val Asn Asn Pro Gln Ile Cys Gly  
           35                  40

<210> 375  
 <211> 151  
 <212> DNA  
 <213> Conus purpurascens

<220>  
 <221> CDS  
 <222> (1)..(120)

<400> 375  
 tct gat ggc agg gat gct gag aaa aca ggc ttt gac acg acc att gtg 48  
 Ser Asp Gly Arg Asp Ala Glu Lys Thr Gly Phe Asp Thr Thr Ile Val  
   1                  5                  10                  15  
 ccg gaa gac tgc tgt tcg gat cct tcc tgt tgg agg ctg cat agt tta 96  
 Pro Glu Asp Cys Cys Ser Asp Pro Ser Cys Trp Arg Leu His Ser Leu  
           20                  25                  30  
 gct tgt act gga att gta aac cgc tgaatgctcca ggaccctctg aaccacgacg 150  
 Ala Cys Thr Gly Ile Val Asn Arg  
           35                  40  
 t 151

<210> 376  
 <211> 40  
 <212> PRT  
 <213> Conus purpurascens

<400> 376  
 Ser Asp Gly Arg Asp Ala Glu Lys Thr Gly Phe Asp Thr Thr Ile Val  
   1                  5                  10                  15  
 Pro Glu Asp Cys Cys Ser Asp Pro Ser Cys Trp Arg Leu His Ser Leu  
           20                  25                  30  
 Ala Cys Thr Gly Ile Val Asn Arg  
           35                  40

<210> 377  
 <211> 142  
 <212> DNA  
 <213> Conus purpurascens

<220>  
 <221> CDS  
 <222> (1)..(111)

<400> 377  
 act gat ggc agg agt gct gca gcc ata gcg ttt gcc ctg atc gct ccg 48  
 Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala Phe Ala Leu Ile Ala Pro  
 1 5 10 15  
 acc gtc tgc tgt act aat cct gcc tgt ctc gtg aat aat ata cgc ttt 96  
 Thr Val Cys Cys Thr Asn Pro Ala Cys Leu Val Asn Asn Ile Arg Phe  
 20 25 30  
 tgt ggt gga aga cgc tgatgccccca ggaccctctg aaccacgacg t 142  
 Cys Gly Gly Arg Arg  
 35

<210> 378  
 <211> 37  
 <212> PRT  
 <213> Conus purpurascens

<400> 378  
 Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala Phe Ala Leu Ile Ala Pro  
 1 5 10 15  
 Thr Val Cys Cys Thr Asn Pro Ala Cys Leu Val Asn Asn Ile Arg Phe  
 20 25 30  
 Cys Gly Gly Arg Arg  
 35

<210> 379  
 <211> 157  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS  
 <222> (1)..(117)

<400> 379  
 tct gat gga aga aat gcc gca agc gac gcc aaa gcg ttt ccc cgg atc 48  
 Ser Asp Gly Arg Asn Ala Ala Ser Asp Ala Lys Ala Phe Pro Arg Ile  
 1 5 10 15  
 gct cca atc gtc agg gac gaa tgc tgt agc gat cct agg tgt cac ggg 96  
 Ala Pro Ile Val Arg Asp Glu Cys Cys Ser Asp Pro Arg Cys His Gly  
 20 25 30  
 aat aat cgg gac cac tgt gct tgaagacgct gctgotccag gaccctctga 147  
 Asn Asn Arg Asp His Cys Ala  
 35  
 accacgacgt 157

<210> 380  
 <211> 39  
 <212> PRT  
 <213> Conus regius

<400> 380  
 Ser Asp Gly Arg Asn Ala Ala Ser Asp Ala Lys Ala Phe Pro Arg Ile  
   1                  5                  10                  15  
 Ala Pro Ile Val Arg Asp Glu Cys Cys Ser Asp Pro Arg Cys His Gly  
                   20                  25                  30  
 Asn Asn Arg Asp His Cys Ala  
                   35

<210> 381  
 <211> 156  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS  
 <222> (1)..(117)

<400> 381  
 tct gat ggc agg aat acc gcg gcc gac gaa aaa gcg tcc gac ctg atc 48  
 Ser Asp Gly Arg Asn Thr Ala Ala Asp Glu Lys Ala Ser Asp Leu Ile  
   1                  5                  10                  15  
 tct caa act gtc aag aga gat tgc tgt tcc cat cct ctc tgt aga tta 96  
 Ser Gln Thr Val Lys Arg Asp Cys Cys Ser His Pro Leu Cys Arg Leu  
                   20                  25                  30  
 ttt gtt cca gga ctt tgt att tgaagacgct gctgctccag gaccctctga 147  
 Phe Val Pro Gly Leu Cys Ile  
                   35  
 accacgact 156

<210> 382  
 <211> 39  
 <212> PRT  
 <213> Conus regius

<400> 382  
 Ser Asp Gly Arg Asn Thr Ala Ala Asp Glu Lys Ala Ser Asp Leu Ile  
   1                  5                  10                  15  
 Ser Gln Thr Val Lys Arg Asp Cys Cys Ser His Pro Leu Cys Arg Leu  
                   20                  25                  30  
 Phe Val Pro Gly Leu Cys Ile  
                   35

<210> 383  
 <211> 157  
 <212> DNA  
 <213> Conus regius

<220>  
 <221> CDS



&lt;222&gt; (1)..(117)

&lt;400&gt; 383

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| tct | gat | ggc | agg | aat | gcc | gca | gcc | gac | aac | aaa | gcg | tct | gac | cta | atc | 48 |
| Ser | Asp | Gly | Arg | Asn | Ala | Ala | Ala | Asp | Asn | Lys | Ala | Ser | Asp | Leu | Ile |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| gct | caa | atc | gtc | agg | aga | gga | tgc | tgt | tcc | cat | cct | gtc | tgt | aaa | gtg | 96 |
| Ala | Gln | Ile | Val | Arg | Arg | Gly | Cys | Cys | Ser | His | Pro | Val | Cys | Lys | Val |    |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |            |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|------------|------------|------------|-----|
| agg | tat | cca | gac | ctg | tgt | cgt | tgaagacgct | gctgctccag | gaccctctga | 147 |
| Arg | Tyr | Pro | Asp | Leu | Cys | Arg |            |            |            |     |
|     |     |     | 35  |     |     |     |            |            |            |     |

|            |     |
|------------|-----|
| accacgacgt | 157 |
|------------|-----|

&lt;210&gt; 384

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Conus regius

&lt;400&gt; 384

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Asp | Gly | Arg | Asn | Ala | Ala | Ala | Asp | Asn | Lys | Ala | Ser | Asp | Leu | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Gln | Ile | Val | Arg | Arg | Gly | Cys | Cys | Ser | His | Pro | Val | Cys | Lys | Val |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| Arg | Tyr | Pro | Asp | Leu | Cys | Arg |
|     |     |     | 35  |     |     |     |

&lt;210&gt; 385

&lt;211&gt; 157

&lt;212&gt; DNA

&lt;213&gt; Conus regius

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(117)

&lt;400&gt; 385

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| tct | gat | ggc | agg | aat | gcc | gca | gcc | gac | aac | aga | gcg | tct | gac | cta | atc | 48 |
| Ser | Asp | Gly | Arg | Asn | Ala | Ala | Ala | Asp | Asn | Arg | Ala | Ser | Asp | Leu | Ile |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| gct | caa | atc | gtc | agg | aga | gga | tgc | tgt | tcc | cat | cct | gcc | tgt | aat | gtg | 96 |
| Ala | Gln | Ile | Val | Arg | Arg | Gly | Cys | Cys | Ser | His | Pro | Ala | Cys | Asn | Val |    |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |    |

|     |     |     |     |     |     |     |            |            |            |     |
|-----|-----|-----|-----|-----|-----|-----|------------|------------|------------|-----|
| aat | aat | cca | cac | att | tgt | ggc | tgaagacgct | gctgctccag | gaccctctga | 147 |
| Asn | Asn | Pro | His | Ile | Cys | Gly |            |            |            |     |
|     |     |     | 35  |     |     |     |            |            |            |     |

|            |     |
|------------|-----|
| accacgacgt | 157 |
|------------|-----|

&lt;210&gt; 386

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Conus regius

&lt;400&gt; 386

Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Arg Ala Ser Asp Leu Ile  
 1 5 10 15

Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Ala Cys Asn Val  
 20 25 30

Asn Asn Pro His Ile Cys Gly  
 35

&lt;210&gt; 387

&lt;211&gt; 157

&lt;212&gt; DNA

&lt;213&gt; Conus regius

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(117)

&lt;400&gt; 387

tct gat ggc agg aat gcc gca gcc gac aac aaa ccg tct gac cta atc 48  
 Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Lys Pro Ser Asp Leu Ile  
 1 5 10 15

gct caa atc gtc agg aga gga tgc tgt tcg cat cct gtc tgt aaa gtg 96  
 Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Val Cys Lys Val  
 20 25 30

agg tat tca gac atg tgt ggt tgaagacgct gctgctccag gaccctctga 147  
 Arg Tyr Ser Asp Met Cys Gly  
 35

accacgacgt 157

&lt;210&gt; 388

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Conus regius

&lt;400&gt; 388

Ser Asp Gly Arg Asn Ala Ala Ala Asp Asn Lys Pro Ser Asp Leu Ile  
 1 5 10 15

Ala Gln Ile Val Arg Arg Gly Cys Cys Ser His Pro Val Cys Lys Val  
 20 25 30

Arg Tyr Ser Asp Met Cys Gly  
 35

&lt;210&gt; 389

&lt;211&gt; 154

&lt;212&gt; DNA

&lt;213&gt; Conus stercusmuscarum

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(114)

&lt;400&gt; 389

tct gat ggc agg aat gca gag cga cga caa agc gtc tgt cct ggt cgc 48  
 Ser Asp Gly Arg Asn Ala Glu Arg Arg Gln Ser Val Cys Pro Gly Arg

1                      5                      10                      15

tct ggc ccc agg gga gga tgt tgt tcc cac cct gcc tgt aag gtg cat 96  
 Ser Gly Pro Arg Gly Gly Cys Cys Ser His Pro Ala Cys Lys Val His  
                     20                      25                      30

ttt cca cac agt agt ggt tgacgacgct gatgctccag gaccctctga 144  
 Phe Pro His Ser Cys Gly  
                     35

accacgacgt 154

<210> 390  
 <211> 38  
 <212> PRT  
 <213> Conus stercusmuscarum

<400> 390  
 Ser Asp Gly Arg Asn Ala Glu Arg Arg Gln Ser Val Cys Pro Gly Arg  
   1                      5                      10                      15

Ser Gly Pro Arg Gly Gly Cys Cys Ser His Pro Ala Cys Lys Val His  
                     20                      25                      30

Phe Pro His Ser Cys Gly  
                     35

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 <212> DNA  
 <213> Conus stercusmuscarum

<220>  
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<400> 391  
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 Ser Asp Gly Arg Asn Ala Ala Ala Ser Asp Arg Ala Ser Asp Ala Ala  
   1                      5                      10                      15

cac cag gta tgc tgt tcc aac cct gtc tgt cac gtg gat cat cca gaa 96  
 His Gln Val Cys Cys Ser Asn Pro Val Cys His Val Asp His Pro Glu  
                     20                      25                      30

ctt tgt cgt aga aga cgc tgatgctcca ggaccctctg aaccacgacg t 145  
 Leu Cys Arg Arg Arg Arg  
                     35

<210> 392  
 <211> 38  
 <212> PRT  
 <213> Conus stercusmuscarum

<400> 392  
 Ser Asp Gly Arg Asn Ala Ala Ala Ser Asp Arg Ala Ser Asp Ala Ala  
   1                      5                      10                      15

His Gln Val Cys Cys Ser Asn Pro Val Cys His Val Asp His Pro Glu  
                     20                      25                      30

Leu Cys Arg Arg Arg Arg  
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<210> 393  
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<220>  
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<222> (1)..(123)

<400> 393  
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Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Val  
1 5 10 15  
gct ccg gcc atc agg gga tgc tgt tcc cac cct gtc tgt aac ttg agt 96  
Ala Pro Ala Ile Arg Gly Cys Cys Ser His Pro Val Cys Asn Leu Ser  
20 25 30  
aat cca caa att tgt cgt gga aga cgc tgatgctcca ggaccctctg 143  
Asn Pro Gln Ile Cys Arg Gly Arg Arg  
35 40  
aaccacgacg t 154

<210> 394  
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<400> 394  
Ser Asp Gly Arg Asn Ala Ala Ala Asn Asp Lys Ala Ser Asp Leu Val  
1 5 10 15  
Ala Pro Ala Ile Arg Gly Cys Cys Ser His Pro Val Cys Asn Leu Ser  
20 25 30  
Asn Pro Gln Ile Cys Arg Gly Arg Arg  
35 40

<210> 395  
<211> 117  
<212> DNA  
<213> Conus textile

<220>  
<221> CDS  
<222> (1)..(114)

<400> 395  
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Phe His Gly Arg Asn Ala Ala Ala Lys Ala Ser Gly Leu Val Gly Leu  
1 5 10 15  
acc gac aag agg caa gaa tgc tgt tct cat cct gcc tgt aac gta gat 96  
Thr Asp Lys Arg Gln Glu Cys Cys Ser His Pro Ala Cys Asn Val Asp  
20 25 30  
cat cca gaa att tgt cgt tga 117

His Pro Glu Ile Cys Arg  
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<210> 396  
<211> 38  
<212> PRT  
<213> Conus textile

<400> 396  
Phe His Gly Arg Asn Ala Ala Ala Lys Ala Ser Gly Leu Val Gly Leu  
1 5 10 15

Thr Asp Lys Arg Glu Glu Cys Cys Ser His Pro Ala Cys Asn Val Asp  
20 25 30

His Pro Glu Ile Cys Arg  
35

<210> 397  
<211> 151  
<212> DNA  
<213> Conus tulipa

<220>  
<221> CDS  
<222> (1)..(120)

<400> 397  
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Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala Phe Ala Leu Ile Ala Pro  
1 5 10 15

acc gtc tgg gaa gga tgc tgt tct aat cct gcc tgt ctc gtg aat cat 96  
Thr Val Trp Glu Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His  
20 25 30

ata cgc ttt tgt ggt gga aga cgc tgatgccccca ggaccctctg aaccacgacg 150  
Ile Arg Phe Cys Gly Gly Arg Arg  
35 40

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<210> 398  
<211> 40  
<212> PRT  
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<400> 398  
Thr Asp Gly Arg Ser Ala Ala Ala Ile Ala Phe Ala Leu Ile Ala Pro  
1 5 10 15

Thr Val Trp Glu Gly Cys Cys Ser Asn Pro Ala Cys Leu Val Asn His  
20 25 30

Ile Arg Phe Cys Gly Gly Arg Arg  
35 40

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<212> DNA

<213> Conus virgo

<220>

<221> CDS

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<400> 399

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Ser Asn Gly Met Asn Ala Ala Ala Ile Arg Lys Ala Ser Ala Leu Val  
1 5 10 15

gct cag atc gcc cat cga gac tgc tgt gac gat cct gcc tgc acc gtg 96  
Ala Gln Ile Ala His Arg Asp Cys Cys Asp Asp Pro Ala Cys Thr Val  
20 25 30

aat aat cca ggc ctt tgc act tgaagatgct gctgccccag gaccctctga 147  
Asn Asn Pro Gly Leu Cys Thr  
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accacgacgt 157

<210> 400

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<212> PRT

<213> Conus virgo

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Ser Asn Gly Met Asn Ala Ala Ala Ile Arg Lys Ala Ser Ala Leu Val  
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20 25 30

Asn Asn Pro Gly Leu Cys Thr  
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<210> 401

<211> 154

<212> DNA

<213> Conus geographus

<220>

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1 5 10 15

acc gtc tgg aaa tgc tgt acc att cct tcc tgt tat gag aaa aaa aaa 96  
Thr Val Trp Lys Cys Cys Thr Ile Pro Ser Cys Tyr Glu Lys Lys Lys  
20 25 30

att aaa gca tgt gtc ttt tgacgacgct gatgctccag gaccctctga 144  
Ile Lys Ala Cys Val Phe  
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accacgacgt 154

<210> 402

<211> 38  
 <212> PRT  
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 1 5 10 15  
 Thr Val Trp Lys Cys Cys Thr Ile Pro Ser Cys Tyr Glu Lys Lys Lys  
 20 25 30  
 Ile Lys Ala Cys Val Phe  
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<210> 403  
 <211> 154  
 <212> DNA  
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<220>  
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 1 5 10 15  
 gtc agg aga gga tgc tgt ggc aat cct gcc tgt agc ggc tcc tcg aaa 96  
 Val Arg Arg Gly Cys Cys Gly Asn Pro Ala Cys Ser Gly Ser Ser Lys  
 20 25 30  
 gat gca ccc tct tgt ggt tgaagacgct gctgctccag gaccctctga 144  
 Asp Ala Pro Ser Cys Gly  
 35  
 accacgacgt 154

<210> 404  
 <211> 38  
 <212> PRT  
 <213> Conus regius

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 Ser Asp Gly Ala Val Asp Asp Lys Ala Leu Asp Arg Ile Ala Glu Ile  
 1 5 10 15  
 Val Arg Arg Gly Cys Cys Gly Asn Pro Ala Cys Ser Gly Ser Ser Lys  
 20 25 30  
 Asp Ala Pro Ser Cys Gly  
 35